

**COMPREHENSIVE REPORT FOR THE
WATER RESOURCES MONITORING PROGRAM
1989-1995**

**ELKHORN PROJECT, MONTANA
SANTA FE PACIFIC GOLD CORPORATION**

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1.0 INTRODUCTION

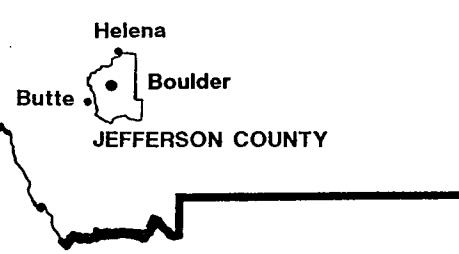
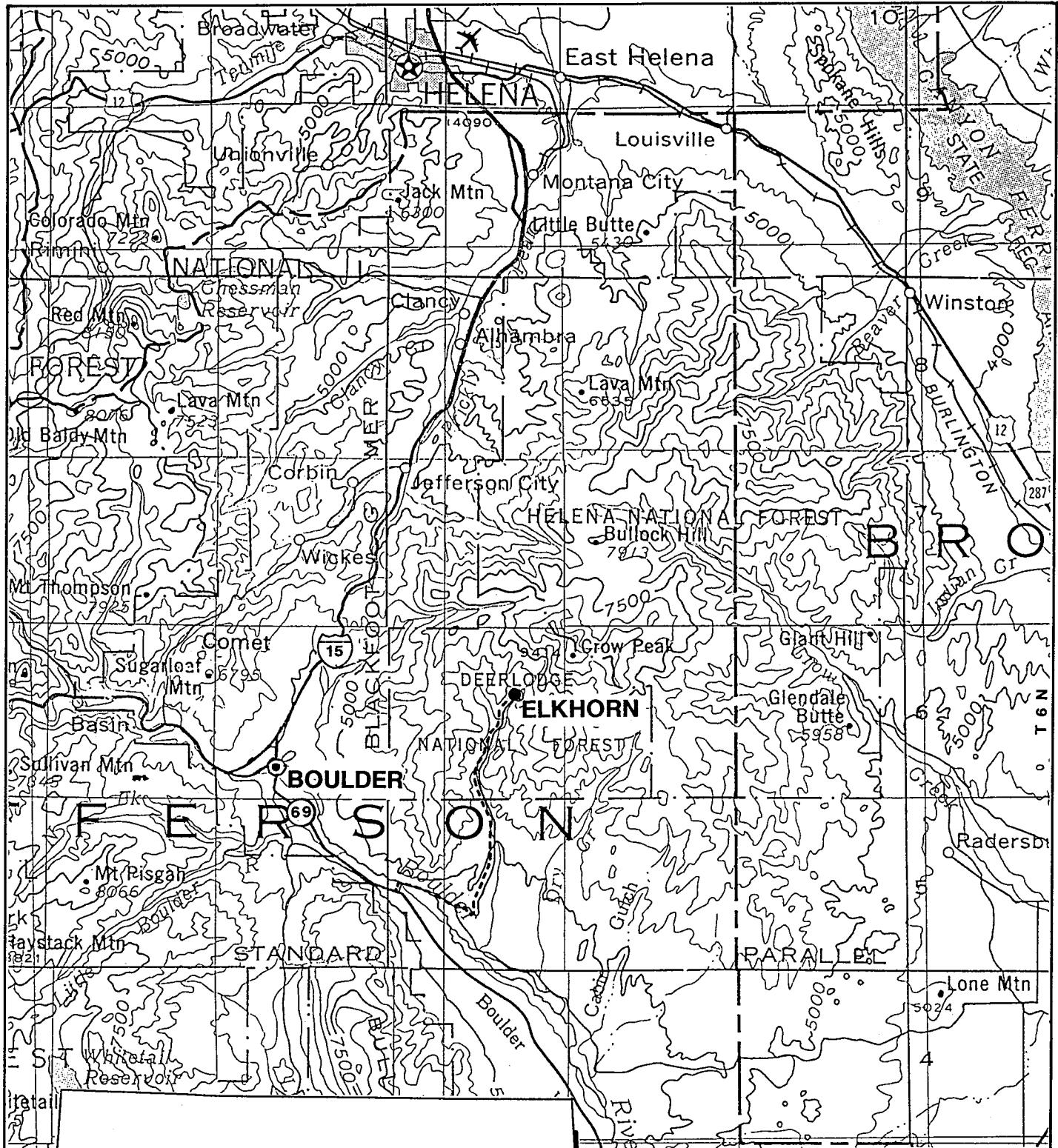
This report is a comprehensive compilation of baseline water resources data collected at the Santa Fe Pacific Gold Corporation (Santa Fe) Elkhorn Project site in Jefferson County, Montana (**Figure 1**). Hydrometrics, Inc. (Hydrometrics) collected surface water and groundwater resource information from September 1989 through August 1994. Maxim Technologies, Inc. (Maxim; formerly Huntingdon Engineering and Environmental, Inc.) was retained by Santa Fe in the fall of 1994 to conduct the final sampling episode for 1994 (October) and two sampling episodes in 1995 (March and May/June). All water resources data collected by Hydrometrics and Maxim during the 1989-95 baseline monitoring program are included in this report.

The surface water investigation generally consisted of sampling at 12 to 14 monitoring stations on Elkhorn Creek and its tributaries in the study area. Twelve groundwater wells have been selectively monitored at the Elkhorn Project site during the 1989-95 monitoring period. Monitoring of the water resources sites included collection of samples for laboratory analysis; field measurement of water temperature, pH, and specific conductance (SC); measurement of depth to static water level in wells; and measurement of flow rate at the surface water stations.

This comprehensive report includes a brief history of the Elkhorn Project water resource baseline investigation, description of the monitoring sites and sampling methodology, and a discussion of analytical results. Quality assurance/quality control (QA/QC) and data validation results also are discussed. Database printouts and statistical summaries are appended to this report.

1.1 PROJECT HISTORY

Water resource monitoring activities at Santa Fe's Elkhorn Project were initiated in the early fall of 1989 and have continued through June 1995. Previously published documents by Hydrometrics and Huntingdon Engineering and Environmental, Inc. which contain water resource information associated with the Elkhorn Project are listed below:



**Location and Vicinity Map
Elkhorn Project
Jefferson County, Montana**

FIGURE 1

- Hydrometrics, Inc., 1993. *Water Resources Baseline Investigation. Elkhorn Project, Jefferson County, Montana. Preliminary Report.* Submitted to Gold Fields Mining Company. January 1993.
- Hydrometrics, Inc., 1994. *Results of 1993 Baseline Water Resources Monitoring. Santa Fe Pacific Gold Corporation, Elkhorn Project. Technical Memorandum.* Submitted to Santa Fe Pacific Minerals Corporation. April 1994.
- Huntingdon Engineering and Environmental, Inc., 1995. *Summary Report for 1994 Water Resources Monitoring Program. Elkhorn Project, Montana. Santa Fe Pacific Gold Corporation.* Submitted to Santa Fe Pacific Gold Corporation, Albuquerque, New Mexico. March 1995.

The water resources baseline study plan was approved by the Montana Department of Environmental Quality (MDEQ; formerly Department of State Lands) and U.S. Forest Service (USFS) - Deerlodge National Forest. The baseline monitoring locations and sampling frequency provided information on surface water and groundwater resources in the project vicinity. Stream drainages included in the baseline surface water monitoring program are Elkhorn Creek and some of its tributaries -- Slaughterhouse Gulch, Greyback Gulch, Sourdough Creek, Turnley Creek and Queen Gulch.

Hydrometrics originally conducted monitoring at 14 surface water stations and 9 groundwater wells beginning in 1989. Baseline water resource data were collected initially for a one year period from the fall of 1989 through 1990. Monitoring was continued for an interim baseline period at selected sites during 1991-95 to maintain consistency and continuity in the database and to provide a long-term record for the study area. Locations of surface water and groundwater sites monitored since the initial baseline study have varied according to project decisions concerning facility siting and engineering and design plans. Hydrometrics (1993) completed aquifer tests at several project monitoring wells and conducted a spring and seep inventory in the study area. A stream characterization study also was conducted by Hydrometrics (1994).

1.2 PROJECT LOCATION

The Elkhorn Project is located in the Deerlodge National Forest on private fee land and on unpatented mining claims controlled by Santa Fe. The site is on the southwestern end of the Elkhorn Mountains at an elevation of approximately 5,000 to 7,000 feet above mean sea level. The unpatented claims are on land administered by the USFS. Sample locations within the Elkhorn Project study area utilized for water resources monitoring are illustrated on **Figure 2**.

The study area is located primarily in the upper Elkhorn Creek drainage in the vicinity of the historic town of Elkhorn. Elkhorn Creek and its tributaries in this area (i.e., Slaughterhouse Gulch, Greyback Gulch, Sourdough Creek, Turnley Creek, and Queen Gulch) flow southward from the Elkhorn Mountains. Elkhorn Creek joins the Boulder River approximately 6 miles from the project site. The Elkhorn Project study area encompasses several historic mines and ore processing facilities.

2.0 MONITORING SITES

A total of 21 surface water stations (GFSW-1 through GFSW-20, and WSW-7) have been established at the Elkhorn Project site since 1989 (**Table 1 and Figure 2**). Surface water monitoring sites are located on the following drainages: Elkhorn Creek, Slaughterhouse Gulch, Greyback Gulch, Sourdough Creek, Turnley Creek, and Queen Gulch. Frequency of sampling for each calendar year is presented in **Table 1**. With the exception of 1992, 11 to 16 of the 21 surface water sites were sampled during any given year. In 1992, only seven surface water sites were sampled.

Four of the 21 monitoring sites were added to the sample program in 1994 to coincide with aquatic sample sites: GFSW-15 (lower Elkhorn Creek); GFSW-16 and GFSW-17 (Queen Gulch); and WSW-7 (upper Greyback Gulch). Three stations on Elkhorn Creek (GFSW-18, GFSW-19, and GFSW-20) were sampled only in 1995. **Table 2** lists several supplemental surface water samples that were collected at various sites in the project area during the baseline monitoring period. Seven of these supplemental water quality samples (SR-A through SR-G) were collected as part of a synoptic measurement event on April 23, 1990.

Groundwater monitoring during the 1989-95 baseline period has utilized 12 monitoring wells (GFMW-1 through GFMW-10; MTHG-A and MTHG-B) in the Elkhorn Project area (**Table 3 and Figure 2**). Completion data for the monitoring wells are summarized in **Table 4**. Some of the monitoring wells are cased exploration holes and one well is a domestic supply well in the townsite of Elkhorn (GFMW-6 -- John Rothfus well).

Three of the monitoring wells have not been sampled during the last two or three years because of access problems: (1) GFMW-1 -- located on a steep hill and inaccessible by vehicle; (2) GFMW-7 -- existing pump in well not working due to electrical problem; and (3) GFMW-8 -- located in a swampy area and inaccessible by vehicle during wet seasons.

TABLE 1
Surface Water Monitoring Sites and Sampling Frequency 1989-95
Elkhorn Project

Station No.	Station Description	Number of Samples Collected by Year						
		1989	1990	1991	1992	1993	1994	1995
GFSW-1	Upper Slaughterhouse Gulch above East Butte area	2	10	4	1	6	3	2
GFSW-2	Lower Slaughterhouse Gulch below East Butte area	2	11	4	1	2	4	2
GFSW-3	Adit seepage below East Butte (town supply spring)	1	9	2	--	--	--	--
GFSW-4	Elkhorn Creek approx. 1 mile above Elkhorn townsite	1	6	1	--	--	--	--
GFSW-5	Elkhorn Creek before joining Turnley Creek	1	12	4	1	3	5	2
GFSW-6	Lower Turnley Creek before joining Elkhorn Creek	1	13	4	2	3	3	2
GFSW-7	Upper Turnley Creek before joining Sourdough Creek	1	12	4	--	2	4	1
GFSW-8	Sourdough Creek before joining Greyback Gulch	1	13	4	--	2	4	1
GFSW-9	Lower Greyback Gulch before joining Sourdough Creek	1	12	4	2	5	4	1
GFSW-10	Seepage from abandoned adit next to Greyback Gulch	2	9	2	--	--	--	--
GFSW-11	Upper Greyback Gulch above the Golden Curry area	2	12	2	1	4	1	1
GFSW-12	Lower Elkhorn Creek approx. 3 miles below GFSW-5	--	11	5	1	2	3	2
GFSW-13	Confluence Sourdough Creek and Greyback Gulch	--	--	--	--	2	3	1
GFSW-14	Elkhorn Creek below confluence with Queen Gulch	--	--	--	--	2	--	--
GFSW-15	Elkhorn Creek approx. 3/4 mile downstream of GFSW-12	--	--	--	--	--	3	2
GFSW-16	Upper Queen Gulch	--	--	--	--	--	5	2
GFSW-17	Lower Queen Gulch	--	--	--	--	--	3	1
GFSW-18	Elkhorn Creek at upper end of Elkhorn townsite	--	--	--	--	--	--	1
GFSW-19	Elkhorn Creek above Slaughterhouse confluence	--	--	--	--	--	--	1
GFSW-20	Elkhorn Creek below Slaughterhouse confluence	--	--	--	--	--	--	1
WSW-7	Upper Greyback Gulch at aquatic sample site	--	--	--	--	--	2	--

Note: Surface water monitoring sites are shown on Figure 2.

TABLE 2
Supplemental Surface Water Monitoring Sites 1989-95
Elkhorn Project

Station No.	Station Description	Number of Samples Collected by Year				
		1989	1990	1991	1994	1995
BARREL	Old barrel with water found in project area	--	--	--	--	1
ELKHC	Elkhorn Creek above Slaughterhouse Gulch	--	1	--	--	--
GBG	Greyback Gulch	1	--	--	--	--
LQG	Lower Queen Gulch	--	3	--	--	--
MH-1	Seep on east side of Mt. Heggen	--	--	--	--	1
MH-3	Seep on east side of Mt. Heggen	--	--	--	1	1
SDC	Sourdough Creek	1	--	--	--	--
SG-01	Staff Gage - Elkhorn Creek	--	5	2	--	--
SG-02	Staff Gage - Sourdough Creek	--	11	2	--	--
SHC	Slaughterhouse Gulch	1	--	--	--	--
SR-A	Synoptic Station A	--	1	--	--	--
SR-B	Synoptic Station B	--	1	--	--	--
SR-C	Synoptic Station C	--	1	--	--	--
SR-D	Synoptic Station D	--	1	--	--	--
SR-E	Synoptic Station E	--	1	--	--	--
SR-F	Synoptic Station F	--	1	--	--	--
SR-G	Synoptic Station G	--	1	--	--	--
UN-ADIT	Unnamed adit discharge	--	--	--	--	2
UQG	Upper Queen Gulch	--	1	--	--	--

Note: Supplemental surface water monitoring sites are not shown on Figure 2.

TABLE 3
Groundwater Monitoring Sites and Sampling Frequency 1989-95
Elkhorn Project

Well No.	Location Description	Number of Samples Collected by Year						
		1989	1990	1991	1992	1993	1994	1995
GFMW-1	Upper Greyback Gulch	4	3	--	1	--	--	--
GFMW-2	Greyback Gulch	1	5	2	1	2	3	1
GFMW-3	Upper Slaughterhouse (pump in-place)	1	4	1	1	2	3	1
GFMW-4	Middle Slaughterhouse	2	4	1	1	--	--	1
GFMW-5	Lower Slaughterhouse (pump in-place)	1	4	1	1	2	3	1
GFMW-6	John Rothfus Well	1	3	2	--	1	3	1
GFMW-7	Elkhorn Airshaft Well	2	4	--	1	1	--	--
GFMW-8	Upper Turnley Creek Meadow	--	3	--	1	--	--	--
GFMW-9	Lower Turnley Creek Meadow	--	3	2	1	2	3	1
GFMW-10	Lower Elkhorn at Proposed Tailings Site	--	--	--	--	--	1	1
MTHG-A	Mt. Heggen - Well A	--	2	--	--	--	--	--
MTHG-B	Mt. Heggen - Well B	--	2	--	--	--	--	--

Note: Groundwater monitoring sites are shown on Figure 2.

TABLE 4
Groundwater Monitoring Well Completion Data
Elkhorn Project

Well No.	Casing Diameter (in)	Total Depth (ft)	Monitor/Screen Interval (ft)	Geologic Unit
GFMW-1	2	710	600-700	Quartz Monzonite/Skarn
GFMW-2	4	180	40-180	Quartz Monzonite
GFMW-3	4	155	40-155	Skarn
GFMW-4	6	>190	20-190+	Skarn
GFMW-5	4	125	20-125	Argillite/Exoskarn
GFMW-6	4	110	70-110	Quartz Monzonite
GFMW-7	6	185	165-185	Quartz Monzonite
GFMW-8	4	40	15-30	Alluvium
GFMW-9	4	27	10-27	Colluvium/alluvium
GFMW-10	4	160	120-160	Bedrock
MTHG-A	6	400	20-400	Endoskarn
MTHG-B	6	400	20-400	Endoskarn

Note: Groundwater monitoring sites are shown on Figure 2.

3.0 FIELD AND LABORATORY METHODS

This section describes the field and laboratory methods that were utilized for collection and analysis of surface water and groundwater samples obtained from the Elkhorn Project. The field and laboratory data and results are discussed in Section 4.0.

3.1 FIELD METHODS

Field procedures used by Hydrometrics for sampling during the period 1989-94 are described in the report, "*Water Resources Baseline Investigation, Elkhorn Project, Jefferson County, Montana, Preliminary Report*" (Hydrometrics 1993). Maxim field personnel followed its Standard Operating Procedures (SOPs) for all aspects of project field work during the period 1994-95. Based on comparison of Hydrometrics' and Maxim's SOPs, field procedures used by both parties during the monitoring events are similar in approach. Water resource monitoring activities included collection of quality samples for laboratory analysis; measurement of field quality parameters for pH, SC, and water temperature; measurement of streamflow at surface water sites; and measurement of depth to groundwater in monitoring wells.

Field samples utilized for the quality assurance/quality control (QA/QC) program include blind field standards, field replicates, field blanks, cross-contamination blanks, and reference lab splits (see Section 4.0 for a description of these samples). The QA/QC samples were submitted with natural samples to the laboratory for analysis. Analytical results from the QA/QC samples are used in data validation procedures which are described in Section 4.0 of this report.

3.2 LABORATORY METHODS

Water quality samples collected by Hydrometrics (September 1989 through August 1994) were shipped to Energy Laboratories in Billings, Montana for analysis. Samples collected by Maxim (October 1994 through June 1995) were shipped to its laboratory in Billings for analysis. Laboratory analyses were conducted in accordance with U.S. Environmental Protection Agency (USEPA 1979) guidelines described in manual EPA-600/4-79-020, "*Methods for Chemical Analysis of Water and Wastes*". Both laboratories are USEPA-certified. The project parameter list used for analysis of surface water samples is presented in **Table 5** and the groundwater parameter list is in **Table 6**. Samples for metals are analyzed as total recoverable for surface water and as dissolved for groundwater.

TABLE 5
Surface Water Parameter List and Detection Limits
Water Resources Monitoring Program 1989-95
Elkhorn Project

Field Parameters	Common Ions	Metals	Others
pH (s.u.)	Calcium (1.0)	Arsenic (.001)	Nitrate + Nitrite as N (.05)
SC ($\mu\text{mhos}/\text{cm}$)	Magnesium (1.0)	Aluminum (0.1)	Orthophosphate as P (.01)
Temp ($^{\circ}\text{C}$)	Sodium (1.0)	Cadmium (.0001)	Total Dissolved Solids (1.0)
Discharge (cfs)	Potassium (1.0)	Chromium (.001)	Total Suspended Solids (1.0)
	Carbonate, CO_3 (1.0)	Copper (.001)	Turbidity (0.1 NTU)
	Bicarbonate, HCO_3 (1.0)	Iron (.03)	Alkalinity as CaCO_3 (1.0)
	Chloride (1.0)	Lead (.002)	Hardness as CaCO_3 (1.0)
	Sulfate, SO_4 (1.0)	Manganese (.01)	Ammonia (0.05)
		Mercury (.0002)	Total Kjeldahl Nitrogen (0.1)
		Molybdenum (.005)	Total Phosphorus as P (.01)
		Nickel (.005)	
		Selenium (.001)	
		Silver (.0005)	
		Zinc (.005)	
		Antimony (.005)	
		Beryllium (.001)	
		Thallium (.002)	
		Barium (.1)	

- Notes:
1. All units in milligrams per liter (mg/l) unless otherwise noted; metals are analyzed as total recoverable.
 2. s.u. = standard units; $\mu\text{mhos}/\text{cm}$ = micromhos per centimeter; cfs = cubic feet per second;
 $^{\circ}\text{C}$ = degrees Celsius; NTU = nephelometric turbidity units.

TABLE 6
Groundwater Parameter List and Detection Limits 1995
Water Resources Monitoring Program
Elkhorn Project

Field Parameters	Common Ions	Metals	Others
pH (s.u.)	Calcium (1.0)	Arsenic (.001)	Nitrate + Nitrite as N (.05)
SC ($\mu\text{mhos}/\text{cm}$)	Magnesium (1.0)	Aluminum (0.1)	Orthophosphate as P (.01)
Temp ($^{\circ}\text{C}$)	Sodium (1.0)	Cadmium (.0001)	Total Dissolved Solids (1.0)
SWL (feet)	Potassium (1.0)	Chromium (.001)	Alkalinity as CaCO_3 (1.0)
Eh (millivolts)	Carbonate, CO_3 (1.0)	Copper (.001)	Hardness as CaCO_3 (1.0)
	Bicarbonate, HCO_3 (1.0)	Iron (.03)	Ammonia (0.05)
	Chloride (1.0)	Lead (.002)	Total Kjeldahl Nitrogen (0.1)
	Sulfate, SO_4 (1.0)	Manganese (.01)	Total Phosphorus as P (.01)
		Mercury (.0002)	
		Molybdenum (.005)	
		Nickel (.005)	
		Selenium (.001)	
		Silver (.0005)	
		Zinc (.005)	
		Antimony (.005)	
		Beryllium (.001)	
		Thallium (.002)	
		Barium (0.1)	

- Notes:
1. All units in milligrams per liter (mg/l) unless otherwise noted; metals are analyzed as dissolved.
 2. s.u. = standard units; $\mu\text{mhos}/\text{cm}$ = micromhos per centimeter; SWL = static water level; Eh = redox potential; $^{\circ}\text{C}$ = degrees Celsius.

4.0 PRESENTATION OF DATA AND RESULTS

The following sections provide a discussion and summary of surface water and groundwater quality sample results collected during the complete baseline monitoring program. The computer database for surface water and groundwater quality results are presented in **Appendices A and B**, respectively. Water quality data have been validated using flagging procedures described in Section 5.0.

Graphs showing concentrations over the period of record of selected water quality parameters for surface water and groundwater monitoring sites are presented in **Appendices C and D**, respectively. Only those monitoring sites with several years of sample data are included in the set of graphs.

4.1 SURFACE WATER

A total of 21 surface water stations (GFSW-1 through GFSW-20, and WSW-7) have been established as routine monitoring sites at the Elkhorn Project site (**Table 1 and Figure 2**). Surface water monitoring sites are located on the following drainages: Elkhorn Creek, Slaughterhouse Gulch, Greyback Gulch, Sourdough Creek, Turnley Creek, and Queen Gulch. Several supplemental surface water samples were also collected at various sites in the project area during the baseline monitoring period (**Table 2**).

4.1.1 Field Parameters

Surface water flow measurements for the baseline monitoring period are presented in **Table 7**. Flow rates obtained during the monitoring period range from dry conditions at some sites to 19.3 cubic feet per second (cfs) at GFSW-12 (Lower Elkhorn Creek) in June 1995. At any given stream monitoring site, flow is highly variable on an annual basis, reflecting the high input from spring snowmelt and rain events. Spring runoff flows generally are highest in April, May, and/or June. During the period of record, highest flows generally occurred during the spring/early summer of 1990, 1994, and 1995. Lower Elkhorn Creek loses a significant amount of its flow in a 3/4-mile reach between stations GFSW-12 and GFSW-15.

Continuous recording stations for stream stage were installed by Hydrometrics at two sites: GFSW-2 (Slaughterhouse Gulch) and GFSW-6 (Turnley Creek). Staff gages and crest gages were also installed by Hydrometrics at seven stream sites: GFSW-2, GFSW-5, GFSW-6, GFSW-9, GFSW-12, SG-1, and SG-2. A synoptic flow measurement event also was conducted by Hydrometrics on Elkhorn Creek in April 1990. Data from the continuous stage recorders, crest gages, staff gages, and synoptic flow events are contained in the Hydrometrics (1993) report "*Water Resources Baseline Investigation, Elkhorn Project, Jefferson County, Montana*".

Field and laboratory pH values for the 1989-95 baseline period are in the range of 6.4 to 9.0 standard units (s.u.). Graphs of pH for selected surface water monitoring sites for the baseline period are included in Appendix C. Specific conductance (SC) measured in the field and laboratory at the routine surface water monitoring sites range from 52 micromhos per centimeter ($\mu\text{mhos}/\text{cm}$) at station GFSW-16 (Queen Gulch) to 657 $\mu\text{mhos}/\text{cm}$ at station GFSW-10 (mine adit drainage in Greyback Gulch). All of the stream sites typically have SC values of less than about 300 $\mu\text{mhos}/\text{cm}$. One of the supplemental sample sites (MH-3; seep on east side of Mt. Heggen) had a high SC of 2,800 $\mu\text{mhos}/\text{cm}$.

Surface water temperature of streams measured in the field ranged from 0.2 degrees Celsius ($^{\circ}\text{C}$) in January 1993 to 18.0 $^{\circ}\text{C}$ in June 1990. Water from the seep at site MH-3 had the highest temperature of the supplemental sites at 20.5 $^{\circ}\text{C}$.

4.1.2 Nutrients

Nutrients in surface water were analyzed as nitrate+nitrite as N, total kjeldahl nitrogen, ammonia, total phosphorus, and orthophosphate. Nitrate+nitrite concentrations at the routine monitoring sites for the period of record range from 0.83 milligrams per liter (mg/l) at station GFSW-05 to less than the laboratory detection limits of 0.05 and 0.01 mg/l at many stations. The seeps on Mt. Heggen (MH-1 and MH-3) had nitrate+nitrite concentrations from 14.8 to 115.0 mg/l. Kjeldahl nitrogen concentrations at the routine sites range from <0.10 to 1.15 mg/l and ammonia is in the range <0.05 to 0.10 mg/l. Kjeldahl nitrogen and ammonia for the Mt. Heggen seeps are in the ranges of 1.37 to 2.20 mg/l and <0.05 to 1.2 mg/l, respectively. Total phosphorus concentrations range from <0.01 to 0.24 mg/l and orthophosphate is from <0.001 to 0.90 mg/l at all of the surface water monitoring sites.

TABLE 7
Surface Water Flow Measurements 1989-95
Water Resources Monitoring Program -- Elkhorn Project

Station No.	9/89	3/90	5/90	6/90	10/90	4/91	5/91	9/91	5/92	4/93	10/93	4/94	5/94	6/94	8/94	10/94	8/95	6/95
GFSW-1	0.35	0.12	0.58	0.69	0.17	0.07	1.32	0.18	0.14	0.27		0.36		0.24	0.26	0.05	1.08	
GFSW-2	0.55	0.04	0.49	0.64	0.17	0.003	0.86	0.14	0.07	0.06	0.3	0.49	0.45	0.12	0.09	0.03	0.83	
GFSW-3	0.002	0.001	0.003	0.004	0.002	0.005	0.004											
GFSW-4	0.59		8.96	2.85	Dry	Dry												
GFSW-5	0.11	0.12	0.66	1.27	0.11	0.04	0.77	0.09	0.12	0.11	0.38	0.29	0.45	0.09	0.03	0.03	0.93	
GFSW-6	1.6	3.0	4.2	5.82	1.25	2.5	8.87	1.45	1.56	2.23	7.35		6.96		1.7	1.5	2.13	17.61
GFSW-7	0.63	0.23	2.21	0.95	0.21	0.6	3.1	0.32		0.67	1.34	3.55	1.86	0.17	0.37		4.49	
GFSW-8	1.0	0.57	6.35	2.6	0.66	4.75	0.48		0.81	2.22	8.21	2.5		0.84	0.97		9.21	
GFSW-9	0.46	0.26	0.87	0.41	0.41	0.22	1.37	1.31	0.22		0.47	1.98	0.89	0.29	0.77		2.34	
GFSW-10	0.02	0.006	0.01	0.012	0.008	Dry	0.009											
GFSW-11	0.42		1.85	0.62	0.32	Dry	0.57										2.81	
GFSW-12																		
GFSW-13																		
GFSW-14																		
GFSW-15																		
GFSW-16																		
GFSW-17																		
GFSW-18																		
GFSW-19																		
GFSW-20																		
WSW-7																		

Note: All measurements in cubic feet per second (cfs); 1 cfs = 448.8 gallons per minute; blank cell indicates that flow was not measured.

4.1.3 Common Ions

Total dissolved solids (TDS) in surface water from the routine monitoring sites for the baseline period range from <20 to 462 mg/l. The highest concentration was at station GFSW-10 (adit seep); TDS was less than 200 mg/l at most of the other stream monitoring sites. The Mt. Heggen seep at site MH-3 had TDS concentrations of approximately 2,500 mg/l. Total suspended solids (TSS) at all surface water monitoring sites range from <1.0 to 342 mg/l and laboratory turbidity concentrations range from <0.10 to 70 nephelometric turbidity units (NTU).

Of the streams in the study area, Elkhorn Creek has the highest alkalinity and hardness concentrations with maximum values of 181 mg/l and 186 mg/l, respectively. The adit seep at GFSW-10 and Mt. Heggen seep at MH-3 have hardness values of approximately 325 and 1,500 mg/l, respectively. Calcium concentrations range from 6 mg/l at stations GFSW-08 and GFSW-16 to 9 mg/l at station GFSW-10. Concentrations of magnesium are in the range of <1.0 to 24 mg/l and sodium ranges from <1.0 to 12 mg/l. Potassium and chloride concentrations were near or below the laboratory detection limit of 1.0 mg/l.

Sulfate concentrations ranged from 1 to 54 mg/l for the routine surface water sample sites, with the exception of about 200 mg/l sulfate at the GFSW-10 adit seep. Mt. Heggen seep site MH-3 had a sulfate concentration of about 1,200 mg/l. A review of the graphs in Appendix C for selected surface water sites for TDS, sulfate, and hardness show that the highest values typically occurred during the spring runoff periods in 1990 and 1994.

4.1.4 Total Recoverable Metals

Concentrations of total recoverable metals from the routine surface water monitoring stations (GFSW-1 through GFSW-20, and WSW-7) at the Elkhorn Project site are relatively low or below laboratory detection levels for the baseline monitoring period. The following is a discussion of selected metals at the routine surface water sites:

- ♦ Aluminum concentrations range from <0.1 to 3.7 mg/l; the highest concentration was measured at GFSW-2 (lower Slaughterhouse Gulch).
- ♦ Antimony was detected only at one station (GFSW-5 -- Elkhorn Creek above Turnley Creek), ranging from <0.005 to 0.013 mg/l.

- ◆ Arsenic generally is in the range of <0.001 to 0.03 mg/l; the highest concentrations occurred at GFSW-10.
- ◆ Cadmium concentrations range from below or near the detection limit of <0.0001 mg/l at all sites, except for station GFSW-5 which had a cadmium range of 0.003 to 0.033 mg/l, and station GFSW-10 with a range of 0.002 to 0.012 mg/l.
- ◆ Copper is in the range of <0.001 to 1.83 mg/l; station GFSW-10 consistently had the highest concentrations.
- ◆ Iron ranges from <0.03 to 4.85 mg/l at the routine surface water sites, with the exception of approximately 12 to 24 mg/l at GFSW-10.
- ◆ Lead concentrations range from <0.002 to 1.37 mg/l; the highest concentrations consistently occurred at station GFSW-5.
- ◆ Concentrations of manganese range from <0.010 to 0.42 mg/l, with the exception of site GFSW-10 having a manganese range of about 2.5 to 3.5 mg/l.
- ◆ Zinc concentrations are in the range of 0.004 to 4.11 mg/l, with the highest values consistently occurring at site GFSW-5.

Based on these observations of metal concentrations at the routine surface water monitoring sites, stations GFSW-5 (Elkhorn Creek before joining Turnley Creek) and GFSW-10 (adit seep in Greyback Gulch) generally have had the highest metal concentrations. Elkhorn Creek at GFSW-5 probably is being influenced by some waste rock/tailings dumps upstream of this site. Concentrations of metals in the supplemental site water samples generally were low or below the laboratory detection limits; the Mt. Heggen seeps at MH-1 and MH-3 did show some elevated metals.

The surface water quality graphs in Appendix C for selected sites show that the highest metal concentrations typically occurred during spring runoff periods in 1990 and 1994. These dates correspond to relatively high stream flow measurements for the period of record.

4.1.5 Water Quality Standards

Table 8 summarizes exceedences of Montana's water quality standards (Circular WQB-7; MDEQ 1995) for surface water quality data that were collected during the 1995 monitoring period. The chronic freshwater aquatic life standards for aluminum, cadmium, copper, iron, lead and zinc were exceeded in 1995. Human health standards were exceeded for cadmium, iron, lead, and manganese. Surface water station GFSW-5 (Elkhorn Creek above Turnley Creek) generally had the most water quality standard exceedences in 1995.

TABLE 8
Exceedences of Water Quality Standards for Surface Water Samples Collected in 1995
Elkhorn Project

Parameter	Montana Freshwater Aquatic Life Chronic Standard	Montana Human Health Standard	Surface Water Monitoring Stations in Exceedence
Aluminum	0.087	None	Most stations exceeded chronic standard in May/June 1995; high value = 1.2 mg/l.
Arsenic	0.190	0.018	No stations exceeded chronic or the human health standards; however, UN Adit was equal to human health standard of 0.018 mg/l.
Cadmium	0.0011*	0.005	Chronic and human health standards exceeded at stations GFSW-05 and UN Adit; high value = 0.048 mg/l. Chronic standard exceeded at GFSW-12 and MH-1; high value = 0.0022 mg/l.
Copper	0.012*	1.0	Chronic standard exceeded at stations GFSW-05,-09,-20, MH-1, MH-3, & UN Adit; high value = 0.100 mg/l.
Iron	1.0	0.3	Chronic standard exceeded at stations GFSW-01,-15,-17,-20, & MH-3; human health standard exceeded at most stations; high value = 1.50 mg/l.
Lead	0.0032*	0.015	Chronic and human health standards exceeded at stations GFSW-05,-12,-18,-19, LQG, & UN Adit; chronic standard only exceeded at stations GFSW-15 & -20; high value = 0.30 mg/l.
Manganese	None	0.05	Human health standard exceeded at stations GFSW-05,-15, MH-1, & MH-3; high value = 5.04 mg/l.
Zinc	0.110*	5.0	Chronic standard exceeded at stations GFSW-05,-12, & UN Adit; high value = 1.68 mg/l.

- Notes:
1. All concentrations in units of milligram per liter (mg/l).
 2. Freshwater chronic standards and human health standards from: Circular WQB-7, Montana Numeric Water Quality Standards, August 3, 1995 (MDEQ 1995).
 3. * indicates aquatic life standard is a function of total hardness; assumed hardness for this table is 100 mg/l hardness as CaCO_3 .

4.2 GROUNDWATER

Groundwater monitoring during the 1989-95 baseline period utilized 12 monitoring wells (GFMW-1 through GFMW-10; MTHG-A and MTHG-B) in the Elkhorn Project area (**Table 3 and Figure 2**).

4.2.1 Field Parameters

Field personnel measured static groundwater levels in all monitoring wells prior to purging the wells for sampling. The water level measurements are presented in **Table 9**. Graphic presentations of water levels in selected wells are included in **Appendix D**. Monitoring wells GFMW-3 and GFMW-5 have pumps installed and are used on a regular basis for water supply; therefore, measurements may not represent the true static groundwater level due to intermittent pumping. Well GFMW-6 is a domestic well which was inaccessible for water level measurements in 1991-94. Well GFMW-7 has an in-place submersible pump that has blocked advancement of the water level probe to the water table since early 1990. Well GFMW-8 is located in a swampy area and has been inaccessible during the last two years.

Depth to groundwater in the Elkhorn Project monitoring wells varies from less than 5 feet below ground surface in wells GFMW-8 and GFMW-9 to approximately 170 feet in wells GFMW-1 and GFMW-7. Water levels typically fluctuate 1 to 2 feet on an annual basis; however, fluctuations of over 10 feet have been recorded in wells GFMW-3, -5, and -6.

Temperature of groundwater ranges from 4 to 13 °C. Field and laboratory pH values for the monitoring period are in the range of 6.2 to 9.3 s.u. Specific conductance of groundwater samples range from 142 to 499 $\mu\text{mhos}/\text{cm}$. Redox potential (Eh) was measured in the field during the monitoring period, with a resulting range of 10 to 353 millivolts, indicating the groundwater system is in an oxidizing condition.

4.2.2 Nutrients

Nutrients in groundwater were analyzed as nitrate+nitrite as N, total kjeldahl nitrogen, ammonia, total phosphorus, and orthophosphate. Nitrate+nitrite concentrations in groundwater during the baseline period range from 0.02 to 0.65 mg/l. Ammonia concentrations are at or near the laboratory detection limit of 0.05 mg/l at all wells, with the exception of 0.52 mg/l at well GFMW-10. Total kjeldahl nitrogen is also at or near the laboratory detection limit of 0.10/0.20 mg/l at all wells, except well GFMW-10 which had a concentration of 0.44 mg/l. Orthophosphate concentrations range from <0.01 to 0.19 mg/l and total phosphorus is in the range of <0.01 to 0.33 mg/l.

TABLE 9
Water Level Measurements from Selected Wells
Water Resources Monitoring Program
Elkhorn Project

Station No.	TD (ft)	9/89	10/89	3/90	4/90	5/90	6/90	7/90	10/90	5/91	9/91	5/92	6/93	9/93	5/94	8/94	10/94	3/95	6/95	
GFMW-1	710	177.20	160.38	171.10								168.09							31.85	
GFMW-2	180	16.38		17.13	16.34			15.83	16.76	16.64	16.24	17.81	15.71	13.97	16.54	16.28	16.73		14.90	
GFMW-3	155	26.27		29.59	31.73			23.38	26.46	18.61		24.16	21.09	23.30	22.0		25.41	24.08	20.00	
GFMW-4	>190		14.00	15.07	14.04			13.73	14.12		13.24	14.34							13.95	
GFMW-5	125				30.56			22.43	28.52	14.09		30.07	18.69				29.60	27.69	19.00	
GFMW-6	110		36.25					30.70										23.70	15.23	
GFMW-7	185	168.03	168.80	170.00																
GFMW-8	40					3.69		4.44	4.86			4.88							3.72	
GFMW-9	27						4.48		4.72	4.42	3.95	4.70	4.45	4.05	4.05	4.08	4.33	4.22		
GFMW-10	160																	20.81	20.01	19.23
GFMW-A	400							63.25	64.89									65.82	60.19	
GFMW-B	400							60.69	61.76										58.67	

Note: Water level measurements are presented in feet below ground surface (bgs); TD = total depth of well; blank cell indicates water level not measured; well GFMW-7 has a pump in well that prevents water level probe access; well GFMW-8 is in swampy area making access in spring difficult; well GFMW-10 was installed in September 1994.

4.2.3 Common Ions

Groundwater in the project area wells is classified as a calcium-bicarbonate type with a hardness of from 81 to 237 mg/l and TDS in the range of 103 to 264 mg/l. Calcium concentrations range from 20 to 60 mg/l and magnesium is from 5 to 26 mg/l. Sodium concentrations are relatively low (below 25 mg/l) and potassium is at or near the laboratory detection limit at all monitoring wells. Reported sulfate values range from 5 mg/l at well GFMW-2 to 51 mg/l at GFMW-6. Chloride was consistently near or below the laboratory detection limit. Total alkalinity concentrations range from 71 mg/l at well GFMW-9 to 214 mg/l at GFMW-1. A review of graphs in Appendix D for TDS, hardness, and sulfate in selected monitoring wells shows that no significant fluctuations or trends have occurred during the baseline monitoring period.

4.2.4 Dissolved Metals

Dissolved aluminum, antimony, barium, beryllium, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, silver, and thallium were all near or below laboratory detection limits in groundwater samples collected during the baseline monitoring period. The graphs in **Appendix D** for selected metals in groundwater samples show no significant trends or fluctuations for the period of record.

Concentrations of dissolved arsenic in groundwater range from <0.001 to 0.022 mg/l; well GFMW-9 consistently had the highest arsenic concentrations. Dissolved iron concentrations range from <0.03 to 0.89 mg/l and manganese is at or near the laboratory detection limit (0.01/0.02 mg/l) at most wells except GFMW-7 and GFMW-9, which range from 0.50 to 0.63 mg/l. Concentrations of zinc range from <0.005 at several wells to 0.170 mg/l at well GFMW-3.

4.2.5 Water Quality Standards

Groundwater analytical results for the 1995 monitoring period showed the following exceedences of Montana's human health standards (MDEQ 1995): well GFMW-4 exceeded the iron standard of 0.3 mg/l; and wells GFMW-4, -9, and -10 exceeded the manganese standard of 0.05 mg/l.

5.0 DATA VALIDATION

Hydrometrics and Maxim each developed a QA/QC program to ensure that water resource data of known quality were collected and reported. In general, the QA/QC program describes field sample, laboratory analysis, and data validation procedures which are used to complete a rigorous quantitative review of analytical data.

5.1 DATA VALIDATION PROCEDURES

The fundamental component of the QA/QC program involves submitting control samples along with natural samples to the laboratory for analysis. The control samples submitted with each sample shipment can include a blind field standard (BFS), field replicate, reference lab split (RLS), and cross-contamination blank. A BFS consists of premixed samples from a manufacturer for metals and common ions that have known concentrations of the analytes. A field replicate is a second water sample collected at an established sample site at the same time and analyzed for the same parameters as the associated natural sample. A RLS is similar to a field replicate except that the second sample is sent to a different laboratory. Cross-contamination blanks consist of deionized water put through a sampling device (e.g., bailer or pump for groundwater, or composite water container for surface water) and analyzed for residual and deionized water contamination.

The cross-contamination blank and replicate samples are labeled in a manner that will not allow the laboratory to identify the sample location. Blind field standards are shipped to the laboratory in the original manufacturer's packaging with any identifying information removed. Laboratory results of the field replicate and RLS samples are compared with results of the associated natural samples.

Once laboratory analytical results have been entered into the project database, a computer flagging program compares the results from control sample data with data acceptance criteria. For the BFS samples to pass data acceptance criteria, the laboratory result must fall within the range established by the manufacturer for each particular parameter. The acceptance criterion for the field replicate and RLS samples is based on a relative percent difference (RPD) of 20 percent between the replicate/RLS and associated original samples (USEPA 1988). Cross-contamination blanks result in flagged data if any of the constituents analyzed by the laboratory in these samples is equal to or above the laboratory detection limit.

A computer program assigns "flags" to the natural sample analytical results for which acceptance criteria are not met. The flags are letter codes which alert the data reviewer as to whether the data acceptance criteria were not met for the BFS, field replicate, RLS, and/or cross-contamination blank. The flags are assigned to all natural samples for the parameter and sampling event which are outside the criteria. Most flagged data are considered "estimated" as a result of not meeting the QA/QC criteria. "Rejected" data are based on the BFS results where a given BFS parameter is less than 50 percent of the concentration specified by the manufacturer for that parameter (USEPA 1988). Data validation performed by Hydrometrics is similar in method to data validation performed by Maxim.

5.2 DATA VALIDATION RESULTS

The surface water and groundwater quality data in **Appendices A and B**, respectively, display resulting validation flags. **Table 10** is a summary of validation results for water quality data obtained only during 1995 that are indicated as flagged in **Appendices A and B**. Summaries of data validation results for previous monitoring years are included in the other monitoring reports. Based on a review of these data for the 1995 monitoring period, some water quality values are to be considered "estimated" because of the quality control sample results. None of the water quality data for 1995 are to be considered "rejected" based on the data validation process.

A review of the entire water quality database for the period of record shows that the baseline data collected to date for the Elkhorn Project are valid and acceptable. Only a relatively limited number of parameters exceed acceptable criteria for establishing valid data.

TABLE 10
Validation Summary for 1995 Water Quality Data
Water Resources Monitoring Program -- Elkhorn Project

Chemical Parameter	Data Validation Codes												
	March 1995							May/June 1995					
	F	F%	P	P%	X	A	H	F	F%	P	P%	X	A
Bicarbonate									●				
Sodium	●							●				●■	
Total Dissolved Solids									■				
Kjeldahl Nitrogen								●					
Total Phosphorus								■					
Aluminum									●			●■	
Cadmium						●		●				●■	
Iron		●											
Lead								●				●	
Manganese												■	
Zinc	●												

- Notes:
- = surface water; ■ = groundwater.
 - F = field duplicate results outside acceptable range (PQL-based); F% = field duplicate relative percent difference outside acceptable range; P = reference lab split results outside acceptable range (PQL-based); P% = reference lab split relative percent difference outside acceptable limits; X = field blank contamination; A = blind field standard results outside acceptable limits; and H = holding time exceeded.
 - All parameters bulleted above are to be considered estimated for the respective sample date in 1995.
 - See Appendices A and B for water quality data and validation flags.

6.0 SUMMARY AND CONCLUSIONS

The Water Resources Monitoring Program for the Elkhorn Project is a continuation of the initial baseline investigation that was started in 1989. Data from the 1995 period are intended to extend the entire period of record in which hydrologic information has been collected on the project site. Hydrometrics obtained water resource data from September 1989 through August 1994 and Maxim collected samples from October 1994 through June 1995.

6.1 SURFACE WATER

A total of 21 surface water stations (GFSW-1 through GFSW-20, and WSW-7) have been established as routine monitoring sites at the Elkhorn Project site. Surface water monitoring sites are located on the following drainages: Elkhorn Creek, Slaughterhouse Gulch, Greyback Gulch, Sourdough Creek, Turnley Creek, and Queen Gulch. Several supplemental surface water samples were also collected at various sites in the project area during the baseline monitoring period.

Surface water quality within the Elkhorn Project area generally is of good quality. The water has a neutral pH, SC typically below 300 $\mu\text{mhos}/\text{cm}$, and hardness less than 180 mg/l (moderately hard to hard). Concentrations of nutrients in surface water are low. With the exception of iron, manganese and zinc, total recoverable metals concentrations in streams within the project area generally were below or near project detection limits. Surface water sites with some elevated metals include GFSW-05 (Elkhorn Creek above Turnley Creek confluence), the Mt. Heggen seeps (MH-1 and MH-3), and two historic adit discharges (GFSW-10 and UN Adit).

Chronic freshwater aquatic life standards for aluminum, cadmium, copper, iron, lead and zinc were exceeded in some surface water samples collected in 1995. Human health standards were exceeded in 1995 surface water samples for cadmium, iron, lead, and manganese. The Elkhorn Creek station above the confluence with Turnley Creek (GFSW-05) generally had the most water quality standard exceedences in 1995.

Surface water flow rates during the monitoring period range from dry conditions at some sites to approximately 20 cfs on lower Elkhorn Creek. Flow is highly variable due to the significant mountain snowmelt and rain events, primarily during April, May and June. During the period of record, highest flows generally occurred during the spring/early summer of 1990, 1994, and 1995. Lower Elkhorn Creek loses a significant amount of its flow in a 3/4-mile reach between stations GFSW-12 and GFSW-15.

6.2 GROUNDWATER

Groundwater was monitored using 12 wells in the project area. Water levels were measured and water quality samples were collected from all wells. Groundwater quality samples showed low concentrations of common ions with hardness values typically less than 200 mg/l. The water has a neutral pH, SC less than 500 $\mu\text{mhos}/\text{cm}$, and low concentrations of nutrients. Laboratory analyses reported detectable concentrations of dissolved arsenic, cadmium, copper, iron, manganese, and zinc. These concentrations were generally at or near the laboratory detection limits.

Montana's human health standards were exceeded for the following parameters analyzed from groundwater samples in 1995: well GFMW-4 exceeded the iron standard of 0.3 mg/l; and wells GFMW-4, -9, and -10 exceeded the manganese standard of 0.05 mg/l. Depth to water in the 12 monitoring wells ranged from less than 5 feet to approximately 170 feet below ground surface.

6.3 DATA VALIDATION

Surface water and groundwater quality analytical data for the monitoring period were validated by Hydrometrics and Maxim. Quality control samples collected include blind field standards, reference lab splits, cross-contamination blanks, and field replicates. A computer flagging program was used to identify, by means of a letter code following the analytical value, any sample in which QA/QC criteria were outside acceptable limits for that sample episode. Results of the data validation process show that some water quality data for 1995 are to be considered estimated based on the quality control samples. The QA/QC results show that the overall set of water quality data for entire baseline monitoring period at the Elkhorn Project is valid and acceptable.

6.4 COMPARISON WITH HISTORIC DATA

In general, surface water and groundwater analytical data from the most recent 1995 monitoring period compare well with previous analytical results from the Elkhorn Project site. No significant trends or changes in water quality during the period of record are observed. Many of the metals in surface water reached highest concentrations in early to mid-1990 and 1994.

7.0 REFERENCES

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- U.S. Environmental Protection Agency, 1988. Laboratory Data Validation, Functional Guidelines for Evaluating Inorganic Analyses. July 1, 1988.

APPENDIX A

SURFACE WATER QUALITY DATA FOR 1989-95 WATER RESOURCES MONITORING PROGRAM

ELKHORN MINE
BASELINE MONITORING PROGRAM
SURFACE WATER DATA 1989-1995

3/19/96

FIELD MEASUREMENTS(1)

STATION	SAMPLE	SAMPLE	SAMPLE	LAB	FLOW	FIELD	LAB	FIELD	LAB	WATER
	DATE	TIME	TYPE(2)	NUMBER	(cfs)	MEAS.	pH	CONDUCTANCE	CONDUTTANCE	TEMPERA-
BARREL	5/25/95	1320	N	163542						
ELKHC	5/31/90		N	90-1466	1.18	METER		7.7		
GBG	7/26/89		N	89-1131	.5	EST			61.0	JP%
GFSW-01	9/21/89		N	89-1647	.35	METER	8.0		228.0	5.0
	10/05/89		N	89-1713						
	3/27/90		N	90-6805	.12	METER	7.4		268.0	2.0
	4/09/90		N	90-8047	.18	METER	7.6		247.0	2.5
	4/30/90		N	90-1046	.321	METER	8.0		217.0	2.0
	5/16/90		N	90-1266	.38	METER	7.4		237.0	4.0
	5/29/90		N	90-1465	.58	METER	8.3		235.0	JP%
	5/29/90	DUP		90-1465	.58	METER	8.3		237.0	7.0
	6/11/90		N	90-1561	.91	METER	7.8		206.0	5.5
	6/26/90	RLS		105077	.69	METER	7.7		208.0	7.0
	6/26/90		N	90-1728	.69	METER	8.0		204.0	7.0
	7/12/90		N	90-1926	.66	METER	8.1		193.0	10.0
	8/13/90		N		.31	METER				9.0
	10/10/90	RLS		108582	.17	METER	8.1		205.0	4.2
	10/10/90		N	90-2825	.17	METER	8.1		232.0	4.2
	4/30/91		N		.07	METER				
	5/30/91	RLS		116073	1.32	METER	7.6		225.0	4.5
	5/30/91		N	91-1838	1.32	METER	8.2		241.0	4.5

NOTES: 1) Blank space indicates data were not collected. All data collected from 10/94 to present were collected by Maxim Technologies; all data collected prior to 10/94 were collected by Hydrometrics. s.u. - standard units; umhos/cm - micromhos per centimeter; C - degrees Celsius.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Flow Measurement Method: METER - flow meter; EST - estimated; B&W - calibrated bucket and stopwatch.

INFORMATION:

Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

Data Descriptors: F - field duplicate relative percent difference outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; H - holding time exceeded.

NOTES: 1) Blank space indicates data were not collected. All data collected from 10/94 to present were collected by Maxim Technologies; all data collected prior to 10/94 were collected by Hydrometrics. s.u. - standard units; umhos/cm - micromhos per centimeter; C - degrees Celsius.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Flow Measurement Method: METER - flow meter; EST - estimated; B&W - calibrated bucket and stopwatch.

ELKHORN MINE
BASELINE MONITORING PROGRAM
SURFACE WATER DATA 1989-1995

3/19/96

FIELD MEASUREMENTS(1)

STATION	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE(2)	LAB NUMBER	FLOW		FIELD		FIELD		LAB		WATER TEMPERA-TURE (C)
					(cfs)	MEAS. METHOD(3)	pH (s.u.)	LAB (s.u.)	CONDUCTANCE (umhos/cm)	CONDUCTANCE (umhos/cm)	LAB (umhos/cm)	CONDUCTANCE (umhos/cm)	
GFSW-01	6/28/91	N		91-3656	.87	METER	8.6	8.2			234.0		5.5
	9/16/91	N		92-3079	.18	METER							7.5
	12/07/92	N											1.0
	1/20/93	N		93-4143									.2
	2/03/93	N		93-5321									1.0
	2/18/93	N		93-0513									1.0
	3/04/93	N		93-9681									1.0
	3/04/93	DUP		93-9682									1.0
	4/29/93	N		93-1748	.14	METER	8.2	8.2					2.5
	10/06/93	N		93-4747	.27	METER	8.4	8.2					7.5
	5/03/94	N		94-1778	.36	METER	8.2	8.1					3.1
	8/17/94	N		94-3967	.238	METER	8.2	8.1					8.0
	10/11/94	1630	N	155874	.26	METER	6.9						4.0
	3/22/95	915	N	161226	.049	B&W	6.4						3.0
	6/01/95	1045	N	163782	1.08	METER	7.8						4.0
GFSW-02	9/21/89	N		89-1647	.55	METER							5.0
	10/05/89	N		89-1713									
	3/27/90	N		90-6809	.04	METER	7.6						2.0
	3/27/90	DUP		90-6811	.04	METER	7.4						2.0
	4/09/90	N		90-8046	.111	METER	7.8						3.5
	4/30/90	N		90-1046	.379	METER	7.9						3.0
	4/30/90	DUP		90-1046	.379	METER	8.0						3.0
	5/16/90	N		90-1266	.488	METER	7.9						4.0

NOTES: 1) Blank space indicates data were not collected. All data collected from 10/94 to present were collected by Maxim Technologies; all data collected prior to 10/94 were collected by Hydrometrics. s.u. - standard units; umhos/cm - micromhos per centimeter; C - degrees Celsius.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLs - reference lab split.
3) Flow Measurement Method: METER - flow meter; EST - estimated; B&W - calibrated bucket and stopwatch.

INFORMATION:

Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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FIELD MEASUREMENTS(1)

STATION	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE(2)	LAB NUMBER	FLOW (cfs)	FIELD MEAS. METHOD(3)	LAB pH (s.u.)	FIELD CONDUCTANCE (umhos/cm)	LAB CONDUCTANCE (umhos/cm)	WATER TEMPERA-TURE (C)
GFSW-02	5/29/90		RLS	104269	.536	METER	7.9		111.0	8.0
	5/29/90		N	90-1465	.536	METER	8.3		242.0	JP%
	6/11/90		N	90-1561	.757	METER	7.8		213.0	7.0
	6/25/90		N	90-1728	.64	METER	8.2		206.0	14.0
	7/09/90		N	90-1925	.54	METER	7.9	8.1	185.0	11.9
	7/13/90		N		.49	METER				14.0
	10/11/90		N	90-2825	.168	METER	8.4	8.0		
	4/30/91		N		.003	EST			245.0	2.6
	5/30/91		N	91-1837	.86	METER	8.2		250.0	6.0
	6/28/91		N		.62	METER				7.0
	9/16/91		RLS	120117	.14	METER	8.8	7.9		
	9/16/91		N	91-3656	.14	METER	8.8	8.3		
	5/12/92		N	92-1807	.07	METER	8.5	8.2		
	5/12/92		DUP	92-1807	.07	METER	8.5	8.2		
	4/29/93		N	93-1747	.062	METER	8.4	8.3		
	10/06/93		N	93-4746	.3	METER	8.5	8.3		
	4/19/94		N	94-1672	.49	METER	8.3			
	4/19/94		DUP	94-1673	.49	METER	8.3		352.0	8.2
	5/03/94		N	94-1779	.45	METER	6.9	8.2		
	8/17/94		RLS	94-3959	.123	METER	8.3			
	8/17/94		N	94-3967	.123	METER	8.3	8.1		
	10/11/94	1700	N	155875	.09	B&W	7.7			
	10/11/94	1715	DUP	155876						
	3/22/95	1015	N	161227	.03	EST	7.6			
									290.0	2.0

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2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Flow Measurement Method: METER - flow meter; EST - estimated; B&W - calibrated bucket and stopwatch.

INFORMATION:

Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

Data Descriptors: F - field duplicate relative percent difference outside acceptable range; P - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

NOTES: 1) Sample Type: N - natural; DUP - field duplicate results outside acceptable range (PQL-based); F% field duplicate relative percent difference outside acceptable range; P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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FIELD MEASUREMENTS(1)

STATION	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE(2)	LAB NUMBER	FLOW (cfs)	FLOW MEAS.	FIELD METHOD(3) (s.u.)	LAB pH (s.u.)	FIELD CONDUCTANCE (umhos/cm)	LAB CONDUCTANCE (umhos/cm)	WATER TEMPERA-TURE (C)
GFSW-02	5/31/95	1230	N	163735	.83	METER	8.4		299.0		8.0
GFSW-03	9/27/89		N	89-1665	.002	METER		7.5		296.0	6.0
	3/27/90		N	90-6810	.001	METER		7.2		295.0	4.0
	4/16/90		N	90-9519	.002	METER		7.2		310.0	5.0
	4/30/90		N	90-1047	.003	METER		7.4		263.0	5.0
	5/16/90		N	90-1266	.003	METER		7.2		289.0	5.0
	5/29/90		N	90-1465	.004	METER		7.5		310.0 JP%	5.5
	6/11/90		N	90-1561	.004	METER		6.8		312.0	5.0
	6/25/90		N	90-1728	.004	METER		7.2		296.0	8.0
	7/09/90		N	90-1925	.003	METER		7.2		268.0	9.6
	10/10/90		N	90-2825	.002	METER		7.3		309.0	5.0
	4/30/91		N	EST							
	6/28/91		N	.004	METER						
								4.7			
GFSW-04	9/22/89		N	89-1647	.59	METER		7.3		79.0	
	5/29/90		N	90-1465	8.96	METER		7.5		61.0 JP%	4.5
	5/31/90		N		5.76	METER					
	6/11/90		N	90-1561	8.51	METER		6.7		52.0	4.0
	6/26/90		N	90-1728	2.85	METER		6.9		52.0	7.0
	6/26/90	DUP		90-1729	2.85	METER		6.7		52.0	7.0
	7/12/90		N	90-1926	.05	EST		7.6		75.0	6.0
	10/10/90			Dry							
	4/30/91			Dry							

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- 2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.
 3) Flow Measurement Method: METER - flow meter; EST - estimated; B&W - calibrated bucket and stopwatch.

INFORMATION:

Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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FIELD MEASUREMENTS(1)

STATION	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE(2)	SAMPLE NUMBER	LAB FLOW (cfs)	FIELD MEAS. METHOD(3)	LAB pH (s.u.)	FIELD CONDUCTANCE (umhos/cm)	LAB CONDUCTANCE (umhos/cm)	WATER TEMPERATURE (C)
GFSW-05	10/04/89		N	89-1713	.11	METER	8.3	287.0	6.8	
	3/27/90		N	90-6808	.12	METER	7.3	265.0	2.0	
	4/09/90		N	90-8049	.19	METER	7.7	355.0	6.0	
	4/23/90		N		.5	METER			8.0	
	5/01/90		RLS	103637	.286	METER	7.5	292.0	6.0	
	5/01/90		N	90-1047	.286	METER	7.7	259.0	6.0	
	5/17/90		N	90-1267	.66	METER	7.5	298.0	10.0	
	5/30/90		N	90-1466	2.03	METER	8.0	159.0 JP%	11.0	
	6/12/90		N	90-1562	1.27	METER	7.9	226.0	7.0	
	6/25/90		N	90-1728	.61	METER	8.3	271.0	18.0	
	7/12/90		N	90-1926	.63	METER	8.4	241.0	15.0	
	8/13/90		N		.28	METER			14.0	
	10/11/90		N	90-2826	.11	METER	7.7	7.9	305.0	4.1
	11/12/90		N		.08	METER				
	4/30/91		N		.039	METER				
	5/30/91		N	91-1838	.77	METER	8.2	338.0	8.0	
	6/28/91		N		.64	METER				
	9/17/91		N	91-3656	.085	METER	7.3	8.2	317.0	7.7
	5/12/92		RLS	127617	.12	METER	8.4	8.4	322.0	6.5
	5/12/92		N	92-1807	.12	METER	8.4	8.3	345.0	6.5
	4/29/93		N	93-1748	.112	METER	8.2	8.3	388.0	6.5
	4/29/93		DUP	93-1748	.112	METER	8.2	8.3	389.0	6.5
	10/06/93		N	93-4746	.38	METER	8.3	8.2	273.0	8.9

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2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Flow Measurement Method: METER - flow meter; EST - estimated; B&W - calibrated bucket and stopwatch.

INFORMATION:

Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

Data Descriptors: F - field duplicate relative percent difference outside acceptable range (PQL-based); F% field duplicate relative percent difference outside acceptable range; P - reference lab split relative percent difference outside acceptable limits; P% - reference lab split relative percent difference outside acceptable limits; A - blind field standard results outside acceptable limits; H - holding time exceeded.

NOTES: 1) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

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FIELD MEASUREMENTS(1)

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STATION	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE(2)	LAB NUMBER	FLOW (cfs)	MEAS. METHOD(3)	FIELD (s.u.)	LAB pH (s.u.)	FIELD CONDUCTANCE (umhos/cm)	LAB CONDUCTANCE (umhos/cm)	WATER TEMPERATURE (C)
GFSW-05	4/19/94		N	94-1672	.29	METER	8.2		295.0		10.0
	5/03/94		DUP	94-1778	.45	METER	7.8	8.2	267.0	294.0	5.7
	5/03/94		N	94-1779	.45	METER	7.8	8.3	267.0	252.0	5.7
	8/17/94		RLS	94-3959	.094	METER	8.4		303.0		11.0
	8/17/94		N	94-3968	.095	METER	8.4	8.1	303.0	304.0	11.0
	8/17/94		DUP	94-3968			8.4	8.1	303.0	290.0	11.0
	10/11/94		N	155877	.028	B&W	7.8		370.0		7.0
	10/11/94		1115	N	161229	.028	B&W	7.4	386.0		3.0
	3/22/95		N	1145							
	5/31/95		N	1145							
				163734	.93	METER	8.3		297.0		9.0
GFSW-06	10/04/89		N	89-1713	1.6	METER	8.0			141.0	5.9
	3/27/90		N	90-6807	3	METER	7.0			153.0	2.0
	4/16/90		N	90-9524	3.9	METER	7.7			108.0	4.0
	4/16/90		DUP	90-9525	3.9	METER	7.6			107.0	4.0
	4/23/90		N		7.66	METER					
	5/01/90		N	90-1047	4.21	METER	7.1			99.0	3.0
	5/16/90		RLS	104105	4	METER	6.8			103.0	7.0
	5/17/90		N	90-1267	4	METER	7.1			106.0	7.0
	5/30/90		N	90-1466	8.44	METER	7.6			85.0	JP%
	6/12/90		N	90-1562	5.38	METER	6.9			90.0	7.5
	6/25/90		N	90-1728	5.82	METER	7.1			101.0	18.0
	7/12/90		N	90-1926	2.04	METER	8.0			124.0	15.0
	8/13/90		N		1.79	METER					
	9/13/90		N		1.3	METER					

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3) Flow Measurement Method: METER - flow meter; EST - estimated; B&W - calibrated bucket and stopwatch.

INFORMATION:

Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable range; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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FIELD MEASUREMENTS(1)

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STATION	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE(2)	LAB NUMBER	FLOW (cfs)	FLOW		LAB pH (s.u.)	FIELD CONDUCTANCE (umhos/cm) (s.u.)	LAB CONDUCTANCE (umhos/cm)	WATER TEMPERATURE (C)
						MEAS.	METHOD(3)				
GFSW-06	10/11/90	N	90-2826	1.25	METER	7.8	7.5			84.0	3.3
	11/12/90	N		1.92	METER						1.0
	4/30/91	N		2.5	EST						
	5/30/91	N	91-1838	8.87	METER		7.5			91.0	7.0
	6/28/91	N		5.24	METER						10.0
	9/17/91	N	91-3656	1.45	METER	7.9	7.6			132.0	8.5
	5/12/92	N	92-1807	1.56	METER	7.7	7.6			119.0	5.4
	6/11/92	N		.96	METER						
	4/29/93	N	93-1748	2.23	METER	7.7	7.8			139.0	4.4
	6/14/93	N		5.31	METER						
	10/07/93	N	93-4747	7.35	METER	8.0	7.5			134.0	6.4
	5/03/94	N	94-1779	6.96	METER	7.0	7.5			104.0	4.0
	8/17/94	N	94-3968	1.7	METER	7.8	7.7			149.0	15.8
	10/11/94	1200	N	155878	1.5	METER	7.1			106.0	5.0
	3/22/95	1130	N	161228	2.13	METER	7.7			152.0	1.0
	5/31/95	1130	N	163733	17.61	METER	7.7			78.0	4.0
GFSW-07	10/06/89	N	89-1742	.63	METER					125.0	
	3/27/90	N	90-6806	.23	METER	7.1				141.0	2.0
	4/16/90	N	90-9522	1.23	METER	7.2				111.0	3.0
	5/01/90	N	90-1047	.99	METER	7.4				92.0	2.0
	5/16/90	N	90-1266	1.2	METER	6.9				107.0	5.0
	5/31/90	N	90-1466	2.21	METER	7.8				91.0	5.5
	6/12/90	N	90-1561	.95	METER					100.0	6.5

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2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.
3) Flow Measurement Method: METER - flow meter; EST - estimated; B&W - calibrated bucket and stopwatch.

INFORMATION:

Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.
Data Descriptors: F - field duplicate relative percent difference outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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FIELD MEASUREMENTS(1)

STATION	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE(2)	LAB NUMBER	FLOW (cfs)	MEAS. METHOD(3)	FLOW MEAS.	LAB pH (s.u.)	FIELD pH (s.u.)	LAB CONDUCTANCE (umhos/cm)	FIELD CONDUCTANCE (umhos/cm)	LAB (umhos/cm)	WATER TEMPERATURE (C)	
GFSW-07	6/12/90		DUP	90-1562	.95	METER	METER	7.4		90.0		6.5		
	6/25/90	N		90-1728	1.24	METER	METER	7.2		101.0		15.0		
	7/12/90	N		90-1926	.54	METER	METER	7.9		122.0		15.0		
	8/13/90	N			.24	METER	METER					15.0		
	10/11/90	N		90-2826	.21	METER	METER	7.5	7.7	150.0		3.6		
	11/12/90	N			.21	METER	METER					1.5		
	12/10/90	N			.19	METER	METER					.5		
	4/30/91	N			.6	EST	METER	7.7		95.0		6.0		
	5/30/91	N		91-1838	3.1	METER	METER					9.0		
	6/28/91	N			1.19	METER	METER							
	9/16/91	N		91-3656	.32	METER	METER	8.3	7.5			131.0		
	4/29/93	N		93-1748	.67	METER	METER	7.4	7.9			135.0		
	10/07/93	N		93-4747	1.34	METER	METER	8.0	7.5	119.0		124.0		
	10/07/93		DUP	93-4747	1.34	METER	METER	8.0	7.4	119.0		125.0		
	4/19/94	N		94-1672	3.55	METER	METER	8.0		232.0		7.7		
	5/03/94	N		94-1779	1.86	METER	METER	8.3	7.7	102.0		106.0		
	8/17/94	RLS		94-3959	.168	METER	METER	7.7		133.0		14.4		
	8/17/94	N		94-3968	.168	METER	METER	7.7	7.7	133.0		143.0		
	10/11/94	1230	N	155879	.37	METER	METER	6.8		239.0		5.0		
	5/31/95	845	N	163729	4.49	METER	METER	7.8		87.0		6.0		
GFSW-08	10/06/89	N		89-1742	1	EST				7.5		76.0	4.9	
	3/26/90	N		90-5804	.57	METER				6.5		89.0	1.0	
	4/16/90	N		90-9521	2.03	METER				6.9		68.0	3.0	

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INFORMATION:

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FIELD MEASUREMENTS (1)

STATION	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE(2)	LAB NUMBER	FLOW (cfs)	FIELD MEAS.	LAB pH (s.u.)	FIELD CONDUCTANCE (umhos/cm)	LAB CONDUCTANCE (umhos/cm)	WATER TEMPERA-TURE (C)	
										FIELD CONDUCTANCE (umhos/cm)	LAB CONDUCTANCE (umhos/cm)
GFSW-08	5/01/90		N	90-1047	1.54	METER	7.3			61.0	1.0
	5/16/90		N	90-1266	2.5	METER	6.5			69.0	3.0
	5/31/90		N	90-1466	6.35	METER	7.3			54.0	JP%
	6/12/90		N	90-1561	3.82	METER	6.7			57.0	4.5
	6/25/90		N	90-1727	2.6	METER	6.9			61.0	11.0
	7/12/90		N	90-1926	1.56	METER	7.6			70.0	14.0
	8/13/90		N		1.04	METER					14.0
	9/13/90		N		.73	METER					12.0
	10/11/90		N	90-2825	.65	METER	7.8	7.3	85.0		3.7
	11/12/90		N		.68	METER					2.0
	12/10/90		N		.65	METER					0.0
	4/30/91		N		.66	METER					
	5/30/91		N	91-1838	4.75	METER	7.1		55.0		5.0
	6/28/91		N		3.04	METER					7.0
	9/17/91		N	91-3656	.48	METER	7.1	7.2		75.0	7.0
	4/29/93		N	93-1748	.81	METER	7.8	7.7		88.0	2.1
	10/07/93		N	93-4747	2.22	METER	8.2	7.2		72.0	4.3
	4/19/94		N	94-1673	8.21	METER	8.4		243.0		4.0
	5/03/94		N	94-1779	2.5	METER	7.8	7.5	60.6	73.0	1.5
	8/17/94		RLS	94-3959	.84	METER	7.7				13.8
	8/17/94		N	94-3968	.84	METER	7.7	7.6	76.0		
	10/11/94	1400	N	155880	.97	METER	8.0		76.0	80.0	13.8
	5/31/95	1100	N	163732	9.21	METER	7.6		99.0	5.0	
										56.0	3.0

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2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Flow Measurement Method: METER - flow meter; EST - estimated; B&W - calibrated bucket and stopwatch.

INFORMATION:

Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable range; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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FIELD MEASUREMENTS(1)

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STATION	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE(2)	LAB NUMBER	FLOW (cfs)	FIELD	LAB	FIELD CONDUCTANCE (umhos/cm)	LAB CONDUCTANCE (umhos/cm)	WATER TEMPERATURE (C)
						MEAS.	pH (s.u.)			
GFSM-09	10/06/89	N	89-1742	.46	METER	8.2		222.0		5.2
	3/26/90	N	90-6803	.26	METER	7.6		242.0		1.0
	4/16/90	N	90-9520	.64	METER	7.6		179.0		2.0
	5/01/90	N	90-1047	.35	METER	7.9		167.0		2.0
	5/16/90	N	90-1266	.57	METER	7.3		182.0		4.0
	5/31/90	N	90-1466	.87	METER	8.0		159.0	JP%	4.5
	6/12/90	N	90-1561	.63	METER	7.1		167.0		4.5
	6/25/90	N	90-1727	.41	METER	7.7		184.0		10.0
	7/13/90	N	90-1936	.33	METER	8.2		192.0		14.0
	8/13/90	N	90-2825	.42	METER					12.0
	10/11/90	N	90-2825	.41	METER	7.7	7.9	195.0		2.7
	11/12/90	N		.37	METER					2.5
	12/10/90	N		.34	METER					1.0
	4/30/91	N		.22	METER					
	5/30/91	N	91-1838	1.37	METER	7.8		123.0		7.0
	6/28/91	N		.61	METER					7.0
	9/17/91	N	91-3656	1.31	METER	7.7	8.0	181.0		7.0
	5/12/92	N	92-1807	.22	METER	8.4	8.0	210.0		2.0
	12/07/92	N	92-5080		Dry					.5
	1/20/93				Dry					
	2/03/93									
	2/18/93	N	93-6515					8.0		.5
	3/04/93	N	93-9683					8.0		.5
	10/06/93	N	93-4747	.47	METER	8.3	7.9	164.0	171.0	8.3

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2) Sample Type: N - natural; DUP - field duplicate; BES - blind field standard; CCB - cross-contamination blank; FB - Field blank; RLS - reference lab split.

3) Flow Measurement Method: METER - flow meter; EST - estimated; B&W - calibrated bucket and stopwatch.

INFORMATION:

Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

Data Descriptors: F - field duplicate relative percent difference outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

NOTES: 1) Sample Type: N - natural; DUP - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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STATION	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE(2)	LAB NUMBER	FLOW	FIELD	LAB	FIELD	LAB	WATER	
					(cfs)	MEAS.	METHOD(3)	(s.u.)	pH	CONDUCTANCE (umhos/cm)	CONDUCTANCE (umhos/cm)
GFSW-09	4/19/94		N	94-1673	1.98	METER	8.3		443.0		4.0
	5/03/94		N	94-1779	.89	METER	8.3	7.9	127.0	161.0	2.0
	8/17/94		RLS	94-3960	.286	METER	8.2		190.0		12.1
	8/17/94		N	94-3968	.286	METER	8.2	8.0	190.0	193.0	12.1
	10/11/94		N	155881	.77	METER	7.9		224.0		5.0
	5/31/95		N	163731	2.34	METER	7.9		132.0		4.0
GFSW-10	9/20/89		N	89-1630	.011	METER		6.9		545.0	6.0
	9/29/89		N	89-1687	.022	METER	6.0		655.0		6.0
	3/26/90		N	90-6802	.006	METER		6.6		565.0	5.0
	4/16/90		N	90-9518	.05	METER		6.8		560.0	5.0
	4/30/90		N	90-1046	.009	METER		6.9		542.0	3.0
	5/16/90		N	90-1266	.01	METER		6.7		633.0	6.0
	5/29/90		N	90-1465	.01	METER		7.0		647.0	JP%
	6/11/90		N	90-1561	.012	METER		6.5		657.0	5.5
	6/26/90		N	90-1728					6.7	642.0	7.0
	7/12/90		N	90-1925	.01	METER		6.8		627.0	13.0
	10/10/90		N	90-2825	.008	METER	6.4	7.0		614.0	5.1
	4/30/91		N	Dry							
	6/28/91		N	.009	METER						
GFSW-11	9/21/89		N	89-1647	.42	METER		6.9		79.0	4.9
	10/05/89		N	89-1713							
	3/26/90		N	90-6801	.21	METER		7.6		180.0	2.0

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2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Flow Measurement Method: METER - flow meter; EST - estimated; B&W - calibrated bucket and stopwatch.

INFORMATION:

Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

Data Descriptors: F - field duplicate relative percent difference outside acceptable range; P - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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FIELD MEASUREMENTS(1)

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STATION	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE(2)	LAB NUMBER	FLOW (cfs)	FLOW MEAS. METHOD(3)	FIELD pH (s.u.)	LAB pH (s.u.)	FIELD CONDUCTANCE (umhos/cm)	LAB CONDUCTANCE (umhos/cm)	WATER TEMPERA-TURE (C)
							FIELD	LAB	FIELD	LAB	
GFSW-11	4/09/90	N	N	90-8050	.32	METER	6.9			152.0	4.0
	4/30/90	N	N	90-1046	.33	METER	7.2			121.0	2.0
	5/16/90	N	N	90-1266	.34	METER	6.8			140.0	3.0
	5/16/90	DUP	DUP	90-1266	.34	METER	7.2			130.0	3.0
	5/29/90	N	N	90-1465	1.85	METER	7.7			101.0	JP%
	6/11/90	RLS	104719		.78	METER	7.2			108.0	5.0
	6/11/90	N	N	90-1561	.78	METER	6.9			120.0	5.0
	6/26/90	N	N	90-1728	.62	METER	7.7			140.0	8.0
	7/12/90	N	N	90-1926	.39	METER	8.1			159.0	7.0
	8/13/90	N	N	90-2825	.42	METER	7.7			10.0	10.0
	10/10/90	N	N	90-2825	.32	METER	7.7			155.0	4.5
	11/12/90	N	N		.39	METER	7.7				
	12/10/90	N	N		.28	METER	2.0				
	4/30/91		Dry								
	6/28/91	N			.57	METER					
	12/07/92	N	92-5080								
	1/20/93	N	93-4144								
	2/03/93	N	93-5322								
	2/18/93	N	93-6514								
	3/04/93	N	93-9684								
	3/05/93	RLS	138390								
	10/12/94	1220	N	155882	.8	EST	6.9			161.0	5.0
	5/31/95	1430	N	163736	2.81	METER	7.8			89.0	4.0

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2) Sample Type: N - natural; DUP - field duplicate; BES - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Flow Measurement Method: METER - flow meter; EST - estimated; B&W - calibrated bucket and stopwatch.

INFORMATION:

Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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FIELD MEASUREMENTS(1)

STATION	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE(2)	LAB NUMBER	FLOW (cfs)	MEAS. METHOD(3)	FIELD	LAB pH (s.u.)	FIELD CONDUCTANCE (umhos/cm)	LAB CONDUCTANCE (umhos/cm)	WATER TEMPERA-TURE (C)
GFSW-12	4/18/90	N		90-9530	.42	METER		7.7		271.0	13.0
	5/01/90	N		90-1047	4.79	METER		7.9		135.0	7.0
	5/18/90	N		90-1267	6.8	METER		7.1		142.0	7.0
	5/31/90	N		90-1466	18.25	METER		7.7		106.0 JP%	8.0
	6/12/90	N		90-1562	20	METER		6.9		98.0	8.0
	6/26/90	N		90-1728	12.67	METER		7.3		106.0	14.0
	7/13/90	N		90-1937	3.21	METER		8.0		157.0	14.0
	8/13/90	N			1.85	METER					17.0
	9/13/90	N			3.33	METER		8.0			15.0
	10/11/90	N		90-2826	1.37	METER		7.6		184.0	4.4
	12/10/90	N		90-3398	1.3	METER		7.3		178.0	1.0
	3/18/91	N		91-1018	1.41	METER		7.2		183.0	0.0
	4/30/91	N			.96	METER					
	5/30/91	N		91-1838	9.95	METER		7.8		127.0	10.0
	6/28/91	N			8.18	METER					11.0
	9/17/91	N		91-3656	2.17	METER		9.0		171.0	9.4
	5/12/92	N		92-1807	1.58	METER		7.9		161.0	6.9
	4/29/93	N		93-1748	2.77	METER		7.6		180.0	6.6
	10/06/93	N		93-4746	4.62	METER		7.9		161.0	8.8
	5/03/94	N		94-1779	7.27	METER		7.8		125.0	8.1
	8/16/94	N		94-3967	1.25	METER		8.2		178.0	12.9
	10/11/94	930		155562	1.72	METER		7.2		192.0	6.0
	3/22/95	1530		161231	3.072	METER		7.7		184.0	3.0
	6/01/95	1630		163789	19.31	METER		7.1		100.0	11.0

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2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Flow Measurement Method: METER - flow meter; EST - estimated; B&W - calibrated bucket and stopwatch.

INFORMATION:

Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); % field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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FIELD MEASUREMENTS(1)

STATION	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE(2)	LAB NUMBER	FLOW (cfs)	FLOW MEAS. METHOD(3)	FIELD pH (s.u.)	LAB pH (s.u.)	FIELD CONDUCTANCE (umhos/cm)	LAB CONDUCTANCE (umhos/cm)	WATER TEMPERATURE (C)
GFSW-13	4/29/93		N	93-1748	1.05	METER	7.5	7.8		118.0	2.8
	10/07/93		N	93-4747	3.36	METER	8.1	7.4		102.0	4.7
	4/19/94		N	94-1673	8.32	METER	8.1			137.0	4.5
	8/17/94		N	94-3959	1.08	METER	8.0			111.0	13.5
	10/11/94	1430	N	155863	1.2	METER	7.7			144.0	5.0
	5/31/95	1000	N	163730	10.63	METER	7.8			70.0	3.0
GFSW-14	4/29/93		N	93-1748	2.36	METER	7.7	8.0		160.0	6.3
	10/06/93		N	93-4746	4.58	METER	7.6	7.8		148.0	8.9
GFSW-15	5/03/94		N	94-1778	1.07	METER	7.9	7.9		197.0	9.7
	8/16/94		N	94-3967	.123	METER	7.7	7.9		354.0	10.4
	10/11/94	830	N	155864	.37	METER	7.5			353.0	7.0
	3/22/95	1615	N	161232	.273	METER	7.6			267.0	5.0
	3/22/95	1630	D	161233							
	6/01/95	1545	N	163788	7.56	METER	7.0			108.0	12.0
GFSW-16	4/28/94		N	94-1707	2.6	METER	8.2			51.9	3.5
	5/03/94		N	94-1778	1.34	METER	7.8	7.6		63.4	4.3
	6/04/94		N		4.99	METER					
	8/17/94		RLS	94-3959	1.25	METER	8.2			79.0	8.0
	8/17/94		N	94-3967	.76	METER	8.2	7.7		79.0	8.0
	10/11/94	1030	N	155865	.56	METER	6.9			110.0	6.0

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2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Flow Measurement Method: METER - flow meter; EST - estimated; B&W - calibrated bucket and stopwatch.

INFORMATION:

Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); % field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; H - holding time exceeded.

A - blind field standard results outside acceptable limits; X - field blank contamination;

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FIELD MEASUREMENTS(1)

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STATION	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE(2)	LAB NUMBER	FLOW (cfs)	FLOW MEAS. METHOD(3)	FIELD pH (s.u.)	LAB pH (s.u.)	FIELD CONDUCTANCE (umhos/cm)	LAB CONDUCTANCE (umhos/cm)	WATER TEMPERATURE (C)
							FIELD	LAB	FIELD	LAB	
GFSW-16	3/22/95	1330	N	161230			7.9		89.0		1.0
	6/01/95	1415	N	163786			7.0		38.0		5.0
GFSW-17	6/04/94		N	94-2435	2.89	METER	7.5	7.5	74.0	76.0	10.0
	8/17/94				Dry						
	10/11/94				Dry						
	6/01/95	1520	N	163787	.84	METER	7.3		69.0		9.0
GFSW-18	6/01/95	1130	N	163783	1.39	METER	7.6		52.0		6.0
GFSW-19	6/01/95	1315	N	163785	.41	METER	7.3		63.0		8.0
GFSW-20	6/01/95	1245	N	163784	1.36	METER	8.0		215.0		8.0
	6/01/95	1300	D	163790							
LQG	5/24/90		N	90-1315	.38	METER	7.3		70.0		6.0
	5/31/90		N		7.15	METER					7.5
	6/11/90		N	90-1561	10.06	METER	6.7				8.0
MH-01	5/25/95	1255	N	163541							
MH-03	6/05/94		N	94-2435			8.4	7.7	2390.0	2800.0	20.5
	5/25/95	1235	N	163540							

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2) Sample Type: N - natural; DUP - field duplicate; BRS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Flow Measurement Method: METER - flow meter; EST - estimated; B&W - calibrated bucket and stopwatch.

INFORMATION:

Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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FIELD MEASUREMENTS(1)

STATION	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE(2)	LAB NUMBER	FLOW		LAB pH (s.u.)	FIELD CONDUCTANCE (umhos/cm)	LAB CONDUCTANCE (umhos/cm)	WATER TEMPERA-TURE (C)
					FLOW (cfs)	MEAS. METHOD(3)				
SDC	7/26/89		N	89-1131	1.5	METER				
SG-01	5/29/90		N		3.53	METER				5.5
	5/31/90		N		1.4	METER				5.5
	6/11/90		N		4.14	METER				5.0
	6/25/90				Dry					
	10/10/90				Dry					
	4/30/91				Dry					
	6/28/91				Dry					
SG-02	4/16/90		N		2.12	METER				3.0
	5/01/90		N		2.11	METER				2.0
	5/16/90		N		3.1	METER				5.0
	5/31/90		N		6.67	METER				4.5
	6/12/90		N		5.07	METER				6.0
	6/25/90		N		4.01	METER				14.0
	7/13/90		N		1.82	METER				13.0
	8/13/90		N		1.51	METER				16.0
	9/13/90		N		1.03	METER				12.0
	10/11/90		N		1.11	METER				4.0
	11/12/90		N		1	METER				2.0
	12/10/90		N		.86	METER				0.0
	4/30/91		N		1	EST				
	6/28/91		N		3.29	METER				8.0

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2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; RLS - reference lab split.

3) Flow Measurement Method: METER - flow meter; EST - estimated; B&W - calibrated bucket and stopwatch.

INFORMATION:

Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable range; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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FIELD MEASUREMENTS(1)

STATION	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE(2)	LAB NUMBER	FLOW (cfs)	MEAS. METHOD(3)	FIELD (s.u.)	LAB pH (s.u.)	FIELD pH (s.u.)	LAB CONDUCTANCE (umhos/cm)	FIELD CONDUCTANCE (umhos/cm)	WATER TEMPERATURE (C)
SHC	7/26/89		N DUP	89-1131 89-1131	.2		EST					7.0
SR-A	4/23/90		N		8.16		METER					
SR-B	4/23/90		N		8.94		METER					8.0
SR-C	4/23/90		N		9.25		METER					8.0
SR-D	4/23/90		N		8.54		METER					8.0
SR-E	4/23/90		N		8.59		METER					8.0
SR-F	4/23/90		N		.2		METER					8.0
SR-G	4/23/90		N		10.35		METER					8.0
UN ADIT	6/01/95	1500	N	163781								
	6/21/95	1500	N	164940								
UQG	5/24/90		N		2.33		METER					7.0
WSW-07	8/17/94		N	94-3959	.134		METER	7.0				9.4

NOTES: 1) Blank space indicates data were not collected. All data collected from 10/94 to present were collected by Maxim Technologies; all data collected prior to 10/94 were collected by Hydrometrics. s.u. - standard units; umhos/cm - micromhos per centimeter; C - degrees Celsius.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Flow Measurement Method: METER - flow meter; EST - estimated; B&W - calibrated bucket and stopwatch.

INFORMATION:

Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); % field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable range; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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FIELD MEASUREMENTS(1)

STATION	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE(2)	LAB NUMBER	FLOW (cfs)	MEAS.	METHOD(3)	FIELD		LAB		WATER TEMPERA-TURE (C)
								FIELD pH (s.u.)	LAB pH (s.u.)	FIELD CONDUCTANCE (umhos/cm)	LAB CONDUCTANCE (umhos/cm)	
WSW-07	10/12/94	1400	N	155873	.48		EST	7.0		77.0		4.0
BLANK	3/28/90		FB	90-6816				6.2				1.0
	6/27/90		FB	90-1729				5.5				3.0
	12/10/90		FB	90-3399				5.6				1.0
	3/18/91		FB	91-1018				5.8				1.0
	5/12/92		FB	92-1807				4.5				2.0
	5/03/94		FB	94-1778				5.4				1.0
	8/17/94		FB	94-3968				4.9				1.0
BLIND FIELD	6/15/90		BFS	90-1648								
	10/12/94		BFS	155883								
	3/22/95		BFS	161234								
	5/31/95		BFS	163739								
												1460.0
												9.2

- NOTES: 1) Blank space indicates data were not collected. All data collected from 10/94 to present were collected by Maxim Technologies; all data collected prior to 10/94 were collected by Hydrometrics. s.u. - standard units; umhos/cm - micromhos per centimeter; C - degrees Celsius.
 2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RBS - reference lab split.
 3) Flow Measurement Method: METER - flow meter; EST - estimated; B&W - calibrated bucket and stopwatch.

INFORMATION:

Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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SOLIDS AND ALKALINITY(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	TOTAL			TURBIDITY (NTU)			CARBONATE AS CO ₃			BICARBONATE AS HC _{CO3}			TOTAL ALKALINITY AS CACO ₃		
			DISSOLVED SOLIDS	SUSPENDED SOLIDS	TURBIDITY (NTU)	CARBONATE AS CO ₃	BICARBONATE AS HC _{CO3}	TOTAL ALKALINITY AS CACO ₃	HARDNESS AS CACO ₃								
BARREL	5/25/95	N														100.0	
ELKHC	5/31/90	N	36		49 JP%	13.00	0	35		29.0						27.0	
GBG	7/26/89	N															
GFSW-01	9/21/89	N	142				0	146		119.0						126.0	
	10/05/89	N															
	3/27/90	N	141 JF%	3			0	168		138.0						154.0	
	4/09/90	N	140	6		1.10	0	159		131.0						138.0	
	4/30/90	N	134 JP%	20	JP%	1.90	0	158		129.0						136.0	
	5/16/90	N	136 JF%P%	37	JF%	3.70	0	157		128.0						134.0	
	5/29/90	N	120	21 JP%		3.40	0	141		116.0						120.0	
	5/29/90	DUP	122	24		3.80	0	140		115.0						122.0	
	6/11/90	N	104 JP%	32		4.70	0	125		102.0						105.0	
	6/26/90	RLS	122	22			0	115		94.0						107.0	
	6/26/90	N	96 JP%	7 JP%		1.40	0	117		96.0						109.0	
	7/12/90	N	106	3		1.10	0	125		103.0						109.0	
	8/13/90	N															
	10/10/90	RLS	140	4 U		1.20	0	133		109.0						122.0	
	10/10/90	N	129	3 JX		.91	0	140		115.0						123.0	
	4/30/91	N															
	5/30/91	RLS	133	80		1.70	0	143		117.0							
	5/30/91	N	146	5 JP		1.40	0	145		119.0						132.0	
	6/28/91	N															
	9/16/91	N	119 JP%	5		.93	0	145		119.0						133.0	
	12/07/92	N	136	1													

NOTES:

- All values are given in mg/L unless otherwise noted.
- Sample Type: N - natural; DUP - field duplicate; BRS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.
- Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.
- Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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SOLIDS AND ALKALINITY(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	TOTAL	SUSPENDED SOLIDS	TURBIDITY (NTU)	CARBONATE AS CO ₃	BICARBOONATE AS HC ₀₃	TOTAL ALKALINITY AS CACO ₃	TOTAL HARDNESS AS CACO ₃
			DISSOLVED SOLIDS						
GFSW-01	1/20/93	N	154	1 U					
	2/03/93	N	138	1					
	2/18/93	N	165	4					
	3/04/93	N	171	2					
	4/29/93	DUP	160	1					
	10/06/93	N	126	3	.50	0	155	127.0	139.0
	5/03/94	N	121	2	.35	0	144	118.0	112.0
	8/17/94	N	149	37	.82	0	159	130.0	133.0
	10/11/94	N	128	4 JF%	.55	0	145	119.0	117.0
	3/22/95	N	136 JH	12	3.71 JH	0	133	109.0	112.0
	6/01/95	N	162	2	.40 U	0	155	127.0	142.0
	9/21/89	N	164	10	1.10	0	150 JF%	123.0	135.0
GFSW-02	10/05/89	N	138		0	153	125.0	133.0	
	3/27/90	N	119 JF%	328		0	156	128.0	152.0
	3/27/90	DUP	152	342		0	155	127.0	155.0
	4/09/90	N	139	64	8.80	0	162	133.0	146.0
	4/30/90	N	125 JP%	20 JP%	3.80	0	160	131.0	139.0
	4/30/90	DUP	136	20	3.60	0	159	130.0	140.0
	5/16/90	N	164 JF%P%	58 JF%	31.00	0	155	127.0	141.0
	5/29/90	RLS	113	34		0	124	102.0	111.0
	5/29/90	N	116	22 JP%	7.60	0	143	117.0	124.0
	6/11/90	N	114 JP%	38	7.30	0	124	102.0	109.0
	6/25/90	N	118 JP%	1 UJP%	1.80	0	127	101.0	114.0
	7/09/90	N	120	5	1.10	0	125	103.0	109.0
	7/13/90	N							

NOTES:

- 1) All values are given in mg/L unless otherwise noted
- 2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.
- 3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.
- 4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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SOLIDS AND ALKALINITY(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	TOTAL DISSOLVED SOLIDS	SUSPENDED SOLIDS	TURBIDITY (NTU)	CARBONATE AS CO ₃	BICARBONATE AS HC ₀₃	TOTAL ALKALINITY AS CACO ₃	TOTAL HARDNESS AS CACO ₃
			-----	-----	-----	-----	-----	-----	-----
GFSW-02	10/11/90	N	131	7	1.60	0	150	123.0	131.0
	4/30/91	N	154	65 JP	35.00	0	146	120.0	136.0
	5/30/91	N	6/28/91	188	4 U	1.04	0	148	122.0
	9/16/91	RLS	131 JP%	1 U	.88	0	152	124.0	124.0
	9/16/91	N	124	1 UJP	.28	0	166	124.0	137.0
	5/12/92	N	143	2	.82	0	165	136.0	151.0
	5/12/92	DUP	146	1	.80	0	161	135.0	150.0
	4/29/93	N	131	1	.52	0	146	132.0	147.0
	10/06/93	N	4/19/94	136	13	1.10	0	146	120.0
	4/19/94	N	DUP	136	13	1.10	0	158	115.0
	5/03/94	N	8/17/94	RLS	17 JF%	2.30	0	149	102.0
	8/17/94	N	143	31	11.30 JH	0	135	122.0	114.0
	10/11/94	N	146 JH	26	6.85 JH	0	133	111.0	113.0
	10/11/94	DUP	151 JH	2	.65	0	178	146.0	121.0
	3/22/95	N	186	14	.99	0	155 JF%	127.0	156.0
	5/31/95	N	9/27/89	186	1 U	.07	0	161	141.0
			3/27/90	153 JF%	1	0	165	132.0	148.0
			4/16/90	167	1 U	0	163	135.0	163.0
			4/30/90	171 JP%	2 JP%	.27	0	160	133.0
			5/16/90	184 JF%P%	4 JF%	.10 U	0	166	153.0
			5/29/90	165	1 UJP%	.13	0	157	155.0
			6/11/90	177 JP%	3	.38	0	164	161.0
								128.0	152.0
								135.0	157.0

NOTES: 1) All values are given in mg/L unless otherwise noted

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable range; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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SOLIDS AND ALKALINITY(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	TOTAL DISSOLVED SOLIDS	SUSPENDED SOLIDS	TURBIDITY (NTU)	CARBONATE AS CO ₃	BICARBONATE AS HC ₀₃	TOTAL ALKALINITY AS CACO ₃	TOTAL HARDNESS AS CACO ₃
			-----	-----	-----	-----	-----	-----	-----
GFSW-03	6/25/90	N	178 JP%	1 UJP%	.58	0	164	134.0	159.0
	7/09/90	N	197	1	.16	0	160	131.0	155.0
	10/10/90	N	180	1 U	.21	0	164	135.0	159.0
	4/30/91	N							
	6/28/91	N							
GFSW-04	9/22/89	N	49	1 JP%	.78	0	46	38.0	39.0
	5/29/90	N	20				29	24.0	26.0
	5/31/90	N							
	6/11/90	N	24 JP%	3	.78	0	16	13.0	20.0
	6/26/90	N	40 JP%	1 UJP%	.34	0	25	20.0	23.0
	6/26/90	DUP	34	1 U	.48	0	28	23.0	22.0
	7/12/90	N	42	1 U	.22	0	41	33.0	35.0
	10/10/90								
	4/30/91								
GFSW-05	10/04/89	N	185	44	18.00	0	163	134.0	155.0
	3/27/90	N	141 JF%	76		0	128	104.0	135.0
	4/09/90	N	181	21	9.90	0	176	144.0	184.0
	4/23/90	N							
	5/01/90	RLS	339	72	49.20	0	154	126.0	150.0
	5/01/90	N	164 JP%	90 JP%	43.00	0	165	135.0	155.0
	5/17/90	N	166 JF%P%	43 JF%	11.00	0	165	135.0	159.0
	5/30/90	N	60	303 JP%	70.00	0	77	63.0	74.0
	6/12/90	N	117 JP%	56	13.00	0	114	94.0	101.0
	6/25/90	N	158 JP%	1 UJP%	1.20	0	153	126.0	144.0
	7/12/90	N	150	1 U	.71	2	142	119.0	136.0

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable range; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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SOLIDS AND ALKALINITY(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	TOTAL DISSOLVED SOLIDS			TURBIDITY (NTU)	CARBONATE AS CO ₃	BICARBONATE AS HC ₀₃	ALKALINITY AS CACO ₃	TOTAL HARDNESS AS CACO ₃
			TOTAL SOLIDS	SUSPENDED SOLIDS	-					
GFSW-05	8/13/90	N	163	2 JX	1.40	0	0	169	138.0	156.0
	10/11/90	N								
	11/12/90	N								
	4/30/91	N	204	6 JP	2.30	0	0	166	136.0	168.0
	5/30/91	N								
	6/28/91	N								
	9/17/91	N	184	JP%	1 U	2.50	0	178	145.0	172.0
	5/12/92	RLS	206	4	1.30	0	0	168	138.0	
	5/12/92	N	229	1 UJP	.27	0	0	183	150.0	183.0
	4/29/93	N	217	2	.65	1 U	0	162	134.0	186.0
	4/29/93	DUP	228	2	.50	0	0	170	140.0	184.0
	10/06/93	N	163	1 U	.40	0	0	168	138.0	140.0
	4/19/94	N								
	5/03/94	DUP	161	42	4.50	0	0	168	134.0	155.0
	5/03/94	N	155	40	5.00	0	0	191	137.0	149.0
	8/17/94	RLS								
	8/17/94	N	185	24 JF%	2.40	0	0	202	165.0	152.0
	8/17/94	DUP	181	10	2.50	0	0	173	142.0	153.0
	10/11/94	N	202	JH	1 U	.87 JH	0	167	137.0	161.0
	3/22/95	N	213	1 U	.40	0	0	161	132.0	161.0
	5/31/95	N	180	68	4.10	0	0	155 JF%	127.0	153.0
GFSW-06	10/04/89	N	89	8	1.10	0	0	72	59.0	68.0
	3/27/90	N	83	JF%	1 U	0	0	75	62.0	75.0
	4/16/90	N	85	1 U	.40	0	0	59	49.0	47.0
	4/16/90	DUP	92	1 U	.40	0	0	54	45.0	46.0
	4/23/90	N								

NOTES: 1) A11 values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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SOLIDS AND ALKALINITY(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	TOTAL DISSOLVED SOLIDS	SUSPENDED SOLIDS	TURBIDITY (NTU)	CARBONATE AS CO ₃	BICARBONATE AS HC ₀₃	TOTAL ALKALINITY AS CACO ₃	TOTAL HARDNESS AS CACO ₃
			JP%	JP%	JP%	JP%	JP%	JP%	JP%
GFSW-06	5/01/90	N	60	4	1.00	0	49	40.0	52.0
	5/16/90	RLS	44	1	0	0	46	38.0	43.0
	5/17/90	N	59	1	.78	0	52	43.0	50.0
	5/30/90	N	41	2	1.60	0	37	30.0	34.0
	6/12/90	N	45	2	1.00	0	40	33.0	29.0
	6/25/90	N	68	1	.81	0	49	40.0	46.0
	7/12/90	N	65	1	.96	0	67	55.0	58.0
	8/13/90	N							
	9/13/90	N							
	10/11/90	N	77	2	JX	1.10	0	77	63.0
	11/12/90	N							70.0
	4/30/91	N							
	5/30/91	N	65	1	UJP	1.00	0	40	33.0
	6/28/91	N							38.0
	9/17/91	N	79	1	U	1.90	0	70	58.0
	5/12/92	N	56	3	JP	.26	0	59	49.0
	6/11/92	N							58.0
	4/29/93	N	82	4		1.00	0	63	52.0
	6/14/93	N							60.0
	10/07/93	N	80	1	U	1.00	0	70	57.0
	5/03/94	N	68	2		.56	0	51	42.0
	8/17/94	N	101	6	JF%	1.90	0	87	72.0
	10/11/94	N	81	4		1.91	JH	81	70.0
	3/22/95	N	81	1		.76	0	72	66.0
	5/31/95	N	68	1	U	1.40	0	34	63.0
	10/06/89	N	79	1	U		0	64	53.0
									59.0

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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SOLIDS AND ALKALINITY(1)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	TOTAL DISSOLVED SOLIDS	SUSPENDED SOLIDS	TURBIDITY (NTU)	CARBONATE AS CO ₃	BICARBONATE AS HC ₀₃	TOTAL ALKALINITY AS CACO ₃	TOTAL HARDNESS AS CACO ₃
			-	-	-	-	-		
GFSW-07	3/27/90	N	68 JF%	1 U	.95	0	77	63.0	68.0
	4/16/90	N	85	1		0	59	49.0	48.0
	5/01/90	N	47 JP%	6 JP%		0	51	42.0	46.0
	5/16/90	N	60 JF%P%	5 JF%	1.10	0	55	45.0	47.0
	5/31/90	N	44	2 JP%	1.00	0	42	34.0	37.0
	6/12/90	N	58 JP%	2	.74	0	46	38.0	32.0
	6/12/90	DUP	51	1	.89	0	44	36.0	33.0
	6/25/90	N	47 JP%	1 UJP%	.88	0	50	41.0	45.0
	7/12/90	N	68	1	.71	0	63	51.0	57.0
	8/13/90	N	93	1 JX	.24	0	72	59.0	68.0
	10/11/90	N							
	11/12/90	N							
	12/10/90	N							
	4/30/91	N							
	5/30/91	N	56	5 JP	1.40	0	43	35.0	39.0
	6/28/91	N							
	9/16/91	N	74 JP%	1 U	.92	0	66	54.0	63.0
	4/29/93	N	64	2	.45	0	62	51.0	58.0
	10/07/93	N	66	1 U	.25	0	67	55.0	53.0
	10/07/93	DUP	69	1	.45	0	68	55.0	53.0
	4/19/94	N							
	5/03/94	N	57	9	1.00	0	52	42.0	44.0
	8/17/94	RLS							
	8/17/94	N	93	1 JF%	.46	0	81	67.0	67.0
	10/11/94	N	100 JH	1	.62 JH	0	70	57.0	61.0
	5/31/95	N	64	7	1.30	0	34 JF%	28.0	33.0

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3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	TOTAL	SUSPENDED	TURBIDITY	CARBONATE	BICARBONATE	TOTAL	ALKALINITY	TOTAL	HARDNESS
			DISSOLVED SOLIDS	SOLIDS	(NTU)	AS CO ₃	AS HC ₀₃	AS CACO ₃	AS CACO ₃	AS CACO ₃	AS CACO ₃
GFSW-08	10/06/89	N	40	4		0		38	32.0	33.0	
	3/26/90	N	49	JF%	1	0		45	37.0	39.0	
	4/16/90	N	32	5		0		34	28.0	23.0	
	5/01/90	N	24	JP%	6	JP%	.93	0	34	28.0	28.0
	5/16/90	N	43	JF%P%	3	JF%	.76	0	30	25.0	28.0
	5/31/90	N	31		1	UJP%	1.20	0	21	18.0	20.0
	6/12/90	N	36	JP%	5		1.00	0	24	19.0	10.0
	6/25/90	N	43	JP%	1	UJP%	.62	0	27	22.0	24.0
	7/12/90	N	40	1	U	.43	0	37	30.0	27.0	
	8/13/90	N									
	9/13/90	N									
	10/11/90	N	45		1	JX	.38	0	43	35.0	35.0
	11/12/90	N									
	12/10/90	N									
	4/30/91	N									
	5/30/91	N	34		4	JP	1.10	0	22	18.0	21.0
	6/28/91	N									
	9/17/91	N	55	JP%	2		.43	0	35	28.0	33.0
	4/29/93	N	52		1		.47	0	42	34.0	36.0
	10/07/93	N	46		1	U	.30	0	38	32.0	27.0
	4/19/94	N									
	5/03/94	N	41		1		.79	0	37	30.0	23.0
	8/17/94	RLS									
	8/17/94	N	56		2	JF%	.28	0	43	35.0	32.0
	10/11/94	N	65	JH	1	U	.37	JH	0	38	31.0
	5/31/95	N	47		16		1.80	0	11	JF%	19.0

NOTES: 1) All values are given in mg/L unless otherwise noted

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3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; H - holding time exceeded; A - blind field standard results outside acceptable limits; X - field blank contamination;

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SOLIDS AND ALKALINITY(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	TOTAL DISSOLVED SOLIDS	TOTAL SUSPENDED SOLIDS	TURBIDITY (NTU)	CARBONATE AS CO ₃	BICARBONATE AS HC ₀₃	TOTAL ALKALINITY AS CACO ₃	TOTAL HARDNESS AS CACO ₃
			-	-	-	-	-	-	-
GFSW-09	10/06/89	N	130	14	0.00	0	115	94.0	120.0
	3/26/90	N	135	JP%	5	0	125	103.0	127.0
	4/16/90	N	123	2	0	0	96	79.0	83.0
	5/01/90	N	94	JP%	4	JP%	.86	97	79.0
	5/16/90	N	97	JF%P%	8	JF%	.93	0	104
	5/31/90	N	64	1	JP%	1.10	0	66	86.0
	6/12/90	N	90	JP%	4	1.00	0	80	54.0
	6/25/90	N	110	JP%	1	UJP%	.61	0	70.0
	7/13/90	N	107	3		.53	0	94	76.0
	8/13/90	N						104	94.0
	10/11/90	N	106	2	JX	.37	0	86.0	99.0
	11/12/90	N							
	12/10/90	N							
	4/30/91	N							
	5/30/91	N	80	5	JP	1.30	0	58	48.0
	6/28/91	N							57.0
	9/17/91	N	100	JP%	2		.99	0	95.0
	5/12/92	N	106	1	JP	.14	0	96	79.0
	12/07/92	N	129	4				116	95.0
	1/20/93								109.0
	2/03/93								
	2/18/93	N	140	5					
	3/04/93	N	140	1					
	10/06/93	N	81	2					
	4/19/94	N							
	5/03/94	N	103	1	U	.45	0	81	54.0
	8/17/94	RLS							49.0
									75.0

NOTES:

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- 3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.
- 4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable range; A - blind field standard results outside acceptable limits; X - field blank contamination; H - holding time exceeded.

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SOLIDS AND ALKALINITY(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	TOTAL DISSOLVED SOLIDS	SUSPENDED SOLIDS	TURBIDITY (NTU)	CARBONATE AS CO ₃	BICARBONATE AS HC ₀₃	TOTAL ALKALINITY AS CACO ₃	TOTAL HARDNESS AS CACO ₃
			-	-	-	-	-	-	-
GFSW-09	8/17/94	N	125	6 JF%	.50	0	106	87.0	96.0
	10/11/94	N	131 JH	2	.62 JH	0	104	85.0	97.0
	5/31/95	N	95	61	1.40	0	57 JF%	47.0	58.0
GFSW-10	9/20/89	N	335	14	63.00	0	100	82.0	280.0
	9/29/89	N							
	3/26/90	N	374 JF%	51		0	109	90.0	300.0
	4/16/90	N	404	48		0	117	96.0	283.0
	4/30/90	N	417 JP%	76 JP%	159.00	0	114	93.0	329.0
	5/16/90	N	427 JF%P%	161 JF%	159.00	0	130	106.0	325.0
	5/29/90	N	425	40 JP%	153.00	0	107	88.0	325.0
	6/11/90	N	462 JP%	44	153.00	0	103	84.0	343.0
	6/26/90	N	438 JP%	26 JP%	153.00	0	116	95.0	346.0
	7/12/90	N	460	23	148.00	0	110	90.0	340.0
	10/10/90	N	408	30	135.00	0	106	87.0	311.0
	4/30/91	N							
GFSW-11	6/28/91	N							
	9/21/89	N	63		0	45	37.0	34.0	
	10/05/89	N							
	3/26/90	N	102 JF%	4		0	106	87.0	96.0
	4/09/90	N	146	1 U	.62	0	88	72.0	77.0
	4/30/90	N	79 JP%	16 JP%	.73	0	80	65.0	68.0
	5/16/90	N	62 JF%P%	51 JF%	.46	0	89	73.0	65.0
	5/16/90	DUP	79	8	.51	0	85	70.0	67.0
	5/29/90	N	46	6 JP%	1.20	0	53	44.0	45.0
	6/11/90	RLS	12	6	.88	0	60	49.0	47.0

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SOLIDS AND ALKALINITY(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	TOTAL	DISSOLVED SOLIDS	SUSPENDED SOLIDS	TURBIDITY (NTU)	CARBONATE AS CO ₃	BICARBONATE AS HC ₀₃	TOTAL ALKALINITY AS CACO ₃	TOTAL HARDNESS AS CACO ₃
GFSW-11	6/11/90	N	77 JP%	6	1.10	0	64	52.0	57.0	
	6/26/90	N	73 JP%	1 UJP%	.47	0	85	69.0	76.0	
	7/12/90	N	90	1 U	.46	0	96	79.0	80.0	
	8/13/90	N								
	10/10/90	N	94	2 JX	.49	0	87	72.0	75.0	
	11/12/90	N								
	12/10/90	N								
	4/30/91	N								
	6/28/91	N								
	12/07/92	N	97	2						
	1/20/93	N	96	1 U						
	2/03/93	N	81	2						
	2/18/93	N	129	1 U						
	3/04/93	N	115	1						
	3/05/93	RLS	101	6 U						
	10/12/94	N	20 U	2	.48 JH	0	87	71.0	70.0	
	5/31/95	N	69	47	1.60	0	46 JF%	38.0	37.0	
GFSW-12	4/18/90	N	177	1 U			157	128.0	130.0	
	5/01/90	N	73 JP%	8 JP%	2.40	0	75	85.0	72.0	
	5/18/90	N	73 JF%P%	6 JF%	1.80	0	67	55.0	65.0	
	5/31/90	N	49	38 JP%	7.70	0	52	43.0	46.0	
	6/12/90	N	40 JP%	22	4.60	0	46	37.0	34.0	
	6/26/90	N	48 JP%	4 JP%	1.60	0	54	44.0	50.0	
	7/13/90	N	78	8	.95	0	87	71.0	77.0	
	8/13/90	N								
	9/13/90	N								

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	TOTAL DISSOLVED SOLIDS	TOTAL SUSPENDED SOLIDS	TURBIDITY (NTU)	CARBONATE AS CO ₃	BICARBONATE AS HC ₀₃	TOTAL ALKALINITY AS CACO ₃	TOTAL HARDNESS AS CACO ₃
GFSW-12	10/11/90	N	95	2 JX	.86	0	94	77.0	88.0
	12/10/90	N	97	2 JX	.95	0	94	77.0	82.0
	3/18/91	N	125	2 JX	.36	0	98	80.0	83.0
	4/30/91	N							
	5/30/91	N	76	3 JP	2.30	0	60	49.0	57.0
	6/28/91	N							
	9/17/91	N	104 JP%	1	1.30	0	87	71.0	82.0
	5/12/92	N	98	1 JP	.35	0	82	67.0	75.0
	4/29/93	N	94	2	.54	0	80	65.0	78.0
	10/06/93	N	96	1 U	.40	0	89	73.0	70.0
	5/03/94	N	88	1	.95	0	68	56.0	61.0
	8/16/94	N	105	1 UJF%	.57	0	103	85.0	83.0
	10/11/94	N	126 JH	1 U	.60	JH	0	87	71.0
	3/22/95	N	108	1	.16	0	83	68.0	80.0
	6/01/95	N	81	26	3.50	0	46 JF%	38.0	73.0
									42.0
GFSW-13	4/29/93	N	59	1 U	.62	0	56	46.0	52.0
	10/07/93	N	66	1	.35	0	55	45.0	42.0
	4/19/94	N							
	8/17/94	N							
	10/11/94	N	90 JH	2	.34	JH	0	61	50.0
	5/31/95	N	67	16	1.70	0	29 JF%	24.0	50.0
									56.0
									28.0
GFSW-14	4/29/93	N	82	2	1.00	0	71	58.0	69.0
	10/06/93	N	75	1 U	.70	0	84	69.0	66.0
GFSW-15	5/03/94	N	119	14	.50	0	126	103.0	102.0

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acceptable range; P - reference lab split results outside acceptable range (PQL-based); % - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded duplicate relative percent difference outside acceptable range.

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SOLIDS AND ALKALINITY(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	TOTAL DISSOLVED SOLIDS	TOTAL SUSPENDED SOLIDS	TURBIDITY (NTU)	CARBONATE AS CO ₃	BICARBONATE AS HC ₀₃	TOTAL ALKALINITY AS CACO ₃	TOTAL HARDNESS AS CACO ₃
			-	-	-	-	-	-	-
GFSW-15	8/16/94	N	208	3 JF%	.85	0	220	181.0	168.0
	10/11/94	N	206 JH	1 U	1.42 JH	0	200	164.0	152.0
	3/22/95	N	150	1	1.01	0	144	118.0	123.0
	3/22/95	D	152	1	.98	0	144	118.0	120.0
	6/01/95	N	102	1 U	1.90	0	63 JF%	52.0	59.0
GFSW-16	4/28/94	N							
	5/03/94	N	45	2	.60	0	35	22.0	20.0
	6/04/94	N						29.0	27.0
	8/17/94	RLS							
	8/17/94	N	50	6 JF%	.50	0	48	39.0	37.0
	10/11/94	N	67 JH	1 U	.57 JH	0	49	40.0	38.0
	3/22/95	N	56	1 U	.40 U	0	46	38.0	36.0
	6/01/95	N	45	27	3.00	0	17 JF%	14.0	19.0
GFSW-17	6/04/94	N	48	2	.56	0	48	40.0	38.0
	8/17/94								
	10/11/94								
	6/01/95	N	62	95	5.40	0	34 JF%	28.0	33.0
GFSW-18	6/01/95	N	42	49	3.70	0	29 JF%	24.0	27.0
GFSW-19	6/01/95	N	53	24	14.00	0	29 JF%	24.0	29.0
GFSW-20	6/01/95	N	157	33	5.80	0	144 JF%	118.0	130.0
	6/01/95	D	164	33	5.30	0	145	119.0	132.0

NOTES: 1) All values are given in mg/L unless otherwise noted.

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SOLIDS AND ALKALINITY(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	TOTAL DISSOLVED SOLIDS		TURBIDITY (NTU)	CARBONATE AS CO ₃	BICARBONATE AS HC ₀₃	ALKALINITY AS CACO ₃	TOTAL HARDNESS AS CACO ₃
			TOTAL SOLIDS	SUSPENDED SOLIDS					
LQG	5/24/90	N	52	1 U	.49	0	39	32.0	31.0
	5/31/90	N							
	6/11/90	N	27	JP%	18	3.50	0	32	24.0
MH-01	5/25/95	N	773	11	1.20	0	138	113.0	537.0
MH-03	6/05/94	N	2620			0	142	117.0	1440.0
	5/25/95	N	2490	8	1.20	0	121	99.0	1560.0
SDC	7/26/89	N							
SG-01	5/29/90	N							
	5/31/90	N							
	6/11/90	N							
	6/25/90								
	10/10/90								
	4/30/91								
	6/28/91								
SG-02	4/16/90	N							
	5/01/90	N							
	5/16/90	N							
	5/31/90	N							
	6/12/90	N							
	6/25/90	N							
	7/13/90	N							
	8/13/90	N							

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	TOTAL DISSOLVED SOLIDS		TURBIDITY (NTU)	CARBONATE AS CO ₃	BICARBONATE AS HC ₀₃	TOTAL ALKALINITY AS CACO ₃	TOTAL HARDNESS AS CACO ₃
			TOTAL SOLIDS	SUSPENDED SOLIDS					
SG-02	9/13/90	N							
	10/11/90	N							
	11/12/90	N							
	12/10/90	N							
	4/30/91	N							
	6/28/91	N							
SHC	7/26/89	N							
	7/26/89	DUP							
SR-A	4/23/90	N							
SR-B	4/23/90	N							
SR-C	4/23/90	N							
SR-D	4/23/90	N							
SR-E	4/23/90	N							
SR-F	4/23/90	N							
SR-G	4/23/90	N							
UN ADIT	6/01/95	N	235			.30	0	218 JF%	179.0
	6/21/95	N							214.0

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

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SOLIDS AND ALKALINITY(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	TOTAL		TURBIDITY (NTU)	CARBONATE AS CO ₃	BICARBONATE AS HC _{CO3}	TOTAL		ALKALINITY AS CACO ₃	TOTAL HARDNESS AS CACO ₃
			DISSOLVED SOLIDS	SUSPENDED SOLIDS				-	-		
UQG	5/24/90	N									
WSW-07	8/17/94	N									
	10/12/94	N	58	1	.37 JH	0	0	34	33.0	28.0	29.0
											24.0
BLANK	3/28/90	FB	1 U			0	0	6	5.0	1.0 U	
	6/27/90	FB	3	1 U		.23	0	2	2.0	1.0 U	
	12/10/90	FB	1	1		.12	0	1	1.0	1.0 U	
	3/18/91	FB	1	2		.13	0	2	1.0	1.0 U	
	5/12/92	FB	1 U	1 U		.10 U	0	1 U	1.0	1.0 U	
	5/03/94	FB	1 U	1 U		.20	0	3	3.0	1.0 U	
	8/17/94	FB	1 U	1 U		.09	0	2	1.0	1.0 U	
BLIND FIELD	6/15/90	BFS	971	1 U	.44		63	0	157.0	1.0 U	
	10/12/94	BFS	910				0	237	194.0		
	3/22/95	BFS	1160				0	121	198.0		
	5/31/95	BFS							99.0		

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable range; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	COMMON IONS(1)				
			CALCIUM	MAGNESIUM	SODIUM	POTASSIUM	CHLORIDE
BARREL	5/25/95	N	30.0	6.0	12.0		
ELKHC	5/31/90	N	10.0	1.0 U	1.0 U	1 U	3
GBG	7/26/89	N					
GFSW-01	9/21/89	N	38.0	7.0	2.0	1	7
	10/05/89	N					
	3/27/90	N	43.0	11.0	2.0	1 U	8
	4/09/90	N	42.0	8.0	2.0 JF	1	7
	4/30/90	N	44.0	6.0	2.0 JP	1.0 U	7 JP%
	5/16/90	N	44.0	6.0	2.0	2	6 JP%
	5/29/90	N	39.0	6.0	2.0	2	6
	5/29/90	DUP	40.0	6.0	2.0	1 U	6
	6/11/90	N	34.0	JP%	5.0	1.0 U	6
	6/26/90	RLS	36.0	4.0	1.0 U	1 U	6
	6/26/90	N	35.0	5.0	2.0	1 U	5
	7/12/90	N	35.0	5.0	2.0	1 U	7
	8/13/90	N					
	10/10/90	RLS	39.0	6.0	2.0	1.0 U	2
	10/10/90	N	38.0	7.0	3.0	1	11
	4/30/91	N					6 JP%
	5/30/91	RLS	37.0	6.0	1.0 U	1 U	5
	5/30/91	N	43.0	6.0	2.0	1	6
	6/28/91	N					
	9/16/91	N	41.0	8.0	2.0	1 U	6 JP%
	12/07/92	N					
	1/20/93	N					

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	CALCIUM	MAGNESIUM	SODIUM	POTASSIUM	CHLORIDE	SULFATE
GFSW-01	2/03/93	N						
	2/18/93	N						
	3/04/93	N						
	3/04/93	DUP						
	4/29/93	N	42.0	8.0	2.0	1.0	1 U	6
	10/06/93	N	35.0	6.0	2.0	1.0	1 U	6
	5/03/94	N	43.0	6.0	1.0	1.0	1 U	6
	8/17/94	N	36.0	6.0	2.0	1.0	1 U	6
	10/11/94	N	35.0	6.0	1.0	1.0	1 U	6 JF%
	3/22/95	N	42.0	9.0	1.0	1.0	1 U	8
	6/01/95	N	44.0	6.0	1.0	1.0	1 U	5 U
GFSW-02	9/21/89	N	40.0	8.0	2.0	1 U	8	
	10/05/89	N						
	3/27/90	N	45.0	10.0	2.0			
	3/27/90	DUP	45.0	10.0	2.0	2		16
	4/09/90	N	44.0	9.0	2.0	JF	1	8
	4/30/90	N	44.0	7.0	2.0	JP	1 U	8 JP%
	4/30/90	DUP	45.0	7.0	2.0	1.0	1 U	7
	5/16/90	N	45.0	7.0	2.0		2	9 JP%
	5/29/90	RLS	36.0	5.0	2.0	1.0	1 U	7
	5/29/90	N	40.0	6.0	2.0		1 U	7
	6/11/90	N	35.0	JP%	5.0	1.0	1 U	6
	6/25/90	N	36.0	6.0	2.0		1 U	6
	7/09/90	N	35.0	6.0	2.0		1 U	7
	7/13/90	N						
	10/11/90	N	40.0	8.0	2.0	1		7 JP%
	4/30/91	N						

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	COMMON IONS(1)					
			CALCIUM	MAGNESIUM	SODIUM	POTASSIUM	CHLORIDE	SULFATE
GFSW-02	5/30/91	N	44.0	7.0	3.0	1.0	1	9
	6/28/91	N						
	9/16/91	RLS	38.0	7.0	1.0 U		1 U	15
	9/16/91	N	42.0	8.0	2.0		1 U	8 JP%
	5/12/92	N	46.0	9.0	2.0		1 U	9
	5/12/92	DUP	45.0	9.0	3.0		1 U	9
	4/29/93	N	44.0	9.0	3.0	1.0 U	1 U	8
	10/06/93	N	36.0	6.0	2.0	1.0 U	1 U	6
	4/19/94	N						18
	4/19/94	DUP						19
	5/03/94	N	44.0	6.0	1.0	1.0 U	1 U	8
	8/17/94	RLS						
	8/17/94	N	39.0	7.0	2.0	1.0 U	1 U	7
	10/11/94	N	37.0	7.0	2.0	1.0 U	1 U	11 JP%
	10/11/94	DUP	37.0	7.0	2.0	1.0 U	1 U	7
	3/22/95	N	46.0	10.0	1.0 UJF	1.0 U	1 U	13
	5/31/95	N	45.0	7.0	1.0 UJFA	1.0 U	1 U	5 U
GFSW-03	9/27/89	N	43.0	10.0	5.0		1	21
	3/27/90	N	49.0	10.0	5.0		1	21
	4/16/90	N	46.0	10.0	5.0 JF		1	27
	4/30/90	N	46.0	10.0	4.0 JP	1.0 U	1	26 JP%
	5/16/90	N	48.0	10.0	5.0		2	21 JP%
	5/29/90	N	45.0	10.0	6.0		2	22
	6/11/90	N	47.0 JP%	10.0	3.0		1	21
	6/25/90	N	47.0	10.0	5.0		1 U	21
	7/09/90	N	45.0	10.0	5.0		1	26
	10/10/90	N	47.0	10.0	5.0		2	20 JP%

NOTES:

- 1) All values are given in mg/L unless otherwise noted.
- 2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CC8 - cross-contamination blank; FB - field blank; RLS - reference lab split.
- 3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.
- 4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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COMMON IONS(1)

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GFSW-03	4/30/91	N						
	6/28/91	N						
GFSW-04	9/22/89	N	15.0	1.0 U	1.0			
	5/29/90	N	10.0	1.0 U	1.0			
	5/31/90	N						
	6/11/90	N	8.0 JP%	1.0 U	1.0 U			
	6/26/90	N	8.0	1.0 U	1.0			
	6/26/90	DUP	8.0	1.0 U	1.0			
	7/12/90	N	13.0	1.0 U	1.0			
	10/10/90							
	4/30/91							
GFSW-05	10/04/89	N	46.0	10.0	6.0			
	3/27/90	N	40.0	9.0	7.0			
	4/09/90	N	55.0	12.0	9.0 JF			
	4/23/90	N						
	5/01/90	RLS	45.0	9.0	4.0			
	5/01/90	N	48.0	9.0	6.0 JP	1.0		
	5/17/90	N	49.0	9.0	4.0			
	5/30/90	N	24.0	4.0	2.0			
	6/12/90	N	32.0 JP%	5.0	3.0			
	6/25/90	N	44.0	8.0	5.0			
	7/12/90	N	42.0	8.0	4.0			
	8/13/90	N						
	10/11/90	N	47.0	9.0	6.0			
	11/12/90	N						
	4/30/91	N						

NOTES:

- 1) All values are given in mg/L unless otherwise noted.
- 2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.
- 3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.
- 4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	CALCIUM	MAGNESIUM	SODIUM	POTASSIUM	CHLORIDE	SULFATE
GFSW-05	5/30/91	N	51.0	10.0	6.0	2.0	2	34
	6/28/91	N						
	9/17/91	N	51.0	11.0	6.0		1	26 JP%
	5/12/92	RLS	48.0	11.0	7.0		1 U	34
	5/12/92	N	55.0	11.0	8.0		2	35
	4/29/93	N	55.0	12.0	10.0	2.0	2	54
	4/29/93	DUP	55.0	12.0	10.0	2.0	2	54
	10/06/93	N	43.0	8.0	5.0	2.0	1 U	20
	4/19/94	N						23
	5/03/94	DUP	46.0	8.0	4.0	2.0	1	19
	5/03/94	N	46.0	8.0	4.0	2.0	1	18
	8/17/94	RLS						
	8/17/94	N	46.0	9.0	5.0	2.0	1	23
	8/17/94	DUP	46.0	9.0	5.0	2.0	1	23
	10/11/94	N	48.0	10.0	6.0	1.0	1 U	26 JF%
	3/22/95	N	48.0	10.0	1.0 UJF	1.0	1 U	41
	5/31/95	N	48.0	8.0	3.0 JFA	1.0 U	1 U	14
	10/04/89	N	19.0	5.0	5.0		2	12
	3/27/90	N	20.0	6.0	4.0		1 U	14
	4/16/90	N	13.0	4.0	1.0 UJF		1 U	11
	4/16/90	DUP	13.0	4.0	3.0		1 U	11
	4/23/90	N						
	5/01/90	N	15.0	4.0	5.0 JP	1.0	2	12 JP%
	5/16/90	RLS	12.0	3.0	4.0		2	14
	5/17/90	N	14.0	4.0	3.0		2	11 JP%
	5/30/90	N	10.0	2.0	3.0		1 U	8
	6/12/90	N	9.0 JP%	2.0	2.0		1 U	7

NOTES: 1) A11 values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	CALCIUM	MAGNESIUM	SODIUM	POTASSIUM	CHLORIDE	SULFATE
GFSW-06	6/25/90	N	13.0	3.0	3.0	1 U	7	
	7/12/90	N	16.0	4.0	3.0	1 U	10	
	8/13/90	N						
	9/13/90	N						
	10/11/90	N	19.0	5.0	4.0	1	12 JP%	
	11/12/90	N						
	4/30/91	N	11.0	3.0	3.0	1.0 U	8	
	5/30/91	N						
	6/28/91	N						
	9/17/91	N	18.0	5.0	3.0	1 U	11 JP%	
	5/12/92	N	16.0	5.0	4.0	1 U	9	
	6/11/92	N						
	4/29/93	N	17.0	5.0	4.0	1.0	12	
	6/14/93	N						
	10/07/93	N	15.0	4.0	4.0	2.0	1	10
	5/03/94	N	12.0	3.0	4.0	1.0	1 U	10
	8/17/94	N	20.0	5.0	4.0	1.0	1 U	8
	10/11/94	N	18.0	5.0	3.0	1.0 U	1 U	12 JF%
	3/22/95	N	17.0	5.0	1.0 UJF	1.0 U	1 U	14
	5/31/95	N	9.0	2.0	1.0 UJFA	1.0 U	2	5 U
	GFSW-07	10/06/89	N	17.0	4.0	5.0	5	12
		3/27/90	N	20.0	5.0	4.0	1	13
		4/16/90	N	14.0	3.0	3.0 JF	2	10
		5/01/90	N	13.0	3.0	4.0 JP	1 U	11 JP%
		5/16/90	N	14.0	3.0	3.0	2	10 JP%
		5/31/90	N	11.0	2.0	2.0	1 U	8
		6/12/90	N	10.0	JP%	3.0	1 U	9

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; A - blind field standard results outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; X - field blank contamination;

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	CALCIUM	MAGNESIUM	SODIUM	POTASSIUM	CHLORIDE	SULFATE
GFSW-07	6/12/90	DUP	10.0	2.0	2.0		1 U	9
	6/25/90	N	13.0	3.0	4.0		1 U	8
	7/12/90	N	17.0	4.0	4.0		1 U	12
	8/13/90	N						
	10/11/90	N	20.0	5.0	4.0		1	13 JP%
	11/12/90	N						
	12/10/90	N						
	4/30/91	N						
	5/30/91	N	11.0	3.0	3.0	1.0 U	1 U	9
	6/28/91	N						
	9/16/91	N	18.0	4.0	4.0		1 U	11 JP%
	4/29/93	N	17.0	4.0	4.0	1.0	1 U	11
	10/07/93	N	15.0	3.0	4.0	1.0	1	9
	10/07/93	DUP	15.0	3.0	4.0	1.0	1	9
	4/19/94	N						
	5/03/94	N	13.0	3.0	4.0	1.0	1 U	7
	8/17/94	RLS						9
	8/17/94	N	19.0	4.0	4.0	1.0		
	10/11/94	N	18.0	4.0	3.0	1.0 U	1 U	11
	5/31/95	N	10.0	2.0	3.0 JFA	1.0 U	1	12 JF%
								5
	10/06/89	N	9.0	2.0	3.0		1 U	7
	3/26/90	N	11.0	3.0	3.0		1	8
	4/16/90	N	8.0	1.0 U	1.0 UJF		1 U	7
	5/01/90	N	8.0	2.0	3.0 JP	1.0 U		7 JP%
	5/16/90	N	8.0	2.0	2.0		2	6 JP%
	5/31/90	N	6.0	1.0	2.0		1 U	5
	6/12/90	N	4.0 JP%	1.0 U	1.0		1 U	5

NOTES:

1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	CALCIUM	MAGNESIUM	SODIUM	POTASSIUM	CHLORIDE	SULFATE
GFSW-08	6/25/90	N	7.0	2.0	3.0		1 U	5
	7/12/90	N	8.0	2.0	2.0		1 U	6
	8/13/90	N						
	9/13/90	N						
	10/11/90	N	10.0	2.0	4.0		1 U	7 JP%
	11/12/90	N						
	12/10/90	N						
	4/30/91	N						
	5/30/91	N	6.0	1.0	3.0	1.0	2	5
	6/28/91	N						
	9/17/91	N	9.0	2.0	3.0		1 U	6 JP%
	4/29/93	N	11.0	2.0	3.0	1.0	1 U	6
	10/07/93	N	8.0	2.0	3.0	1.0	1 U	5
	4/19/94	N						
	5/03/94	N	8.0	2.0	3.0	1.0	1 U	4
	8/17/94	RLS						
	8/17/94	N	9.0	2.0	3.0	1.0	1 U	6
	10/11/94	N	9.0	2.0	2.0	1.0 U	1 U	6 JP%
	5/31/95	N	6.0	1.0	1.0 UFA	1.0 U	3	5 U
GFSW-09	10/06/89	N	28.0	12.0	4.0		2	26
	3/26/90	N	30.0	12.0	3.0		2	24
	4/16/90	N	21.0	7.0	2.0 JF		1	17
	5/01/90	N	24.0	9.0	5.0 JP	2.0	1	19 JP%
	5/16/90	N	23.0	8.0	3.0		3	16 JP%
	5/31/90	N	18.0	6.0	3.0		2	17
	6/12/90	N	20.0 JP%	7.0	2.0		1 U	14
	6/25/90	N	23.0	9.0	3.0		1 U	15

NOTES:

1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	CALCIUM	MAGNESIUM	SODIUM	POTASSIUM	CHLORIDE	SULFATE
GFSW-09	7/13/90	N	24.0	10.0	3.0		1	18
	8/13/90	N						
	10/11/90	N	24.0	9.0	3.0		2	16 JP%
	11/12/90	N						
	12/10/90	N						
	4/30/91	N						
	5/30/91	N	15.0	5.0	3.0	1.0	2	9
	6/28/91	N						
	9/17/91	N	23.0	9.0	3.0		1 U	12 JP%
	5/12/92	N	27.0	10.0	3.0		1 U	18
	12/07/92	N						
	1/20/93							
	2/03/93							
	2/18/93	N						
	3/04/93	N						
	10/06/93	N	20.0	7.0	3.0	1.0	1 U	13
	4/19/94	N						7
	5/03/94	N	19.0	6.0	4.0	2.0	1 U	14
	8/17/94	RLS						
	8/17/94	N	24.0	9.0	4.0	1.0	1 U	15
	10/11/94	N	24.0	9.0	5.0	1.0 U	1 U	16 JP%
	5/31/95	N	15.0	5.0	1.0 UJFA	1.0 U	4	9
	9/20/89	N	79.0	20.0	6.0		2	188
	9/29/89	N						
	3/26/90	N	86.0	21.0	6.0		8	192
	4/16/90	N	80.0	20.0	6.0 JF		7	180
	4/30/90	N	96.0	22.0	7.0 JP	1.0	9	222 JP%

NOTES:

- 1) All values are given in mg/L unless otherwise noted.
- 2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.
- 3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.
- 4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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COMMON IONS(1)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	CALCIUM	MAGNESIUM	SODIUM	POTASSIUM	CHLORIDE	SULFATE
GFSW-10	5/16/90	N	95.0	22.0	7.0		9	206 JP%
	5/29/90	N	95.0	22.0	7.0		9	226
	6/11/90	N	99.0 JP%	24.0	5.0		8	232
	6/26/90	N	99.0	24.0	6.0		6	233
	7/12/90	N	97.0	24.0	7.0		7	244
	10/10/90	N	89.0	21.0	6.0		6	218 JP%
	4/30/91	N						
	6/28/91	N						
	9/21/89	N	11.0	2.0	3.0		1 U	5
	10/05/89	N						
GFSW-11	3/26/90	N	23.0	10.0	3.0		1	7
	4/09/90	N	19.0	7.0	3.0 JF		2	6
	4/30/90	N	17.0	6.0	3.0 JP	1.0 U	2	7 JP%
	5/16/90	N	17.0	6.0	3.0		2	6 JP%
	5/16/90	DUP	17.0	6.0	2.0		3	6
	5/29/90	N	12.0	4.0	4.0		2	1 U
	6/11/90	RLS	12.0	4.0	1.0		1	5
	6/11/90	N	15.0 JP%	5.0	1.0		1 U	6
	6/26/90	N	19.0	7.0	3.0		1 U	6
	7/12/90	N	20.0	8.0	3.0		1	7
	8/13/90	N						
	10/10/90	N	19.0	7.0	3.0		1	6 JP%
	11/12/90	N						
	12/10/90	N						
	4/30/91	N						
	6/28/91	N						
	12/07/92	N						

NOTES: 1) A11 values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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COMMON IONS(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	CALCIUM	MAGNESIUM	SODIUM	POTASSIUM	CHLORIDE	SULFATE
GFSW-11	1/20/93	N						
	2/03/93	N						
	2/18/93	N						
	3/04/93	N						
	3/05/93	RLS	18.0	6.0	4.0	1.0 U	1 U	5 UJF%
	10/12/94	N	10.0	3.0	1.0 UJFA	1.0 U	1 U	5 U
	5/31/95	N						
GFSW-12	4/18/90	N	38.0	9.0	9.0 JF		2	17
	5/01/90	N	21.0	5.0	5.0 JP	1.0	2	14 JP%
	5/18/90	N	19.0	4.0	4.0		3	14 JP%
	5/31/90	N	13.0	3.0	2.0		1 U	8
	6/12/90	N	11.0 JP%	2.0	2.0		1 U	6
	6/26/90	N	15.0	3.0	3.0		1 U	6
	7/13/90	N	22.0	5.0	4.0		1 U	12
	8/13/90	N						
	9/13/90	N						
	10/11/90	N	25.0	6.0	6.0		2	15 JP%
	12/10/90	N	23.0	6.0	6.0		1	17
	3/18/91	N	23.0	6.0	5.0	1.0 U	2	19
	4/30/91	N						
	5/30/91	N	16.0	4.0	4.0		1	11
	6/28/91	N						
	9/17/91	N	23.0	6.0	5.0		3	13 JP%
	5/12/92	N	22.0	5.0	4.0		1 U	13
	4/29/93	N	22.0	6.0	6.0	1.0	1	14
	10/06/93	N	20.0	5.0	5.0	1.0	1 U	13
	5/03/94	N	17.0	4.0	4.0	2.0	1 U	11

NOTES:

- 1) All values are given in mg/L unless otherwise noted.
- 2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.
- 3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.
- 4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	CALCIUM	MAGNESIUM	SODIUM	POTASSIUM	CHLORIDE	SULFATE
GFSW-12	8/16/94	N	24.0	6.0	5.0	1.0	1 U	10
	10/11/94	N	22.0	6.0	4.0	1.0 U	1 U	14 JF%
	3/22/95	N	21.0	5.0	10.0 JF	1.0	1 U	16
	6/01/95	N	12.0	3.0	6.0 JFA	1.0 U	1 U	5 U
	4/29/93	N	14.0	4.0	3.0	1.0	1 U	9
GFSW-13	10/07/93	N	11.0	3.0	3.0	1.0	1 U	7
	4/19/94	N						6
	8/17/94	N						8
	10/11/94	N	14.0	5.0	2.0	1.0 U	1 U	9 JF%
	5/31/95	N	8.0	2.0	2.0 JFA	1.0 U	3	5 U
GFSW-14	4/29/93	N	19.0	5.0	5.0	1.0	1 U	13
	10/06/93	N	19.0	5.0	4.0	1.0	1 U	11
	5/03/94	N	30.0	7.0	7.0	2.0	1 U	14
	8/16/94	N	51.0	10.0	13.0	1.0	2	9
	10/11/94	N	46.0	9.0	8.0	1.0	1	8 JF%
GFSW-15	3/22/95	N	36.0	8.0	5.0 JF	1.0 U	1 U	16
	3/22/95	D	35.0	8.0	2.0	1.0 U	1 U	14
	6/01/95	N	17.0	4.0	5.0 JFA	1.0 U	1	5 U
	4/28/94	N						
	5/03/94	N	9.0	1.0	1.0	1.0 U	1 U	3
GFSW-16	6/04/94	N						
	8/17/94	RLS						
	8/17/94	N	12.0	2.0	2.0	1.0 U	1 U	4
	10/11/94	N	12.0	2.0	1.0 U	1.0 U	1 U	5 JF%

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	CALCIUM	MAGNESIUM	SODIUM	POTASSIUM	CHLORIDE	SULFATE
GFSW-16	3/22/95	N	11.0	2.0	1.0 UJF	1.0 U	1 U	5
	6/01/95	N	6.0	1.0	7.0 JFA	1.0 U	1 U	5 U
GFSW-17	6/04/94	N	11.0	2.0	1.0 U	1.0 U	1 U	3
	8/17/94							
GFSW-18	10/11/94							
	6/01/95	N	10.0	2.0	4.0 JFA	1.0 U	1	5 U
GFSW-19	6/01/95	N	9.0	1.0 U	2.0 JFA	1.0 U	1 U	5 U
	6/01/95	N	10.0	1.0 U	1.0 UJFA	1.0 U	1	5 U
GFSW-20	6/01/95	N	42.0	6.0	1.0 UJFA	1.0 U	1 U	5 U
	6/01/95	D	43.0	6.0	3.0	1.0 U	1 U	5 U
LQ6	5/24/90	N	10.0	1.0	2.0		2	4
	5/31/90	N						
	6/11/90	N	8.0 JP%	1.0	1.0 U		1 U	3
MH-01	5/25/95	N	164.0	31.0	44.0	2.0	12	364
	6/05/94	N	467.0	67.0	182.0	3.0	46	1290
MH-03	5/25/95	N	540.0	51.0	225.0	4.0	36	1150
	7/26/89	N						
SG-01	5/29/90	N						
	5/31/90	N						

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CC8 - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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COMMON IONS(1)

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STATION	SAMPLE DATE	SAMPLE TYPE (2)	CALCIUM	MAGNESIUM	SODIUM	POTASSIUM	CHLORIDE	SULFATE
SG-01	6/11/90	N						
	6/25/90							
	10/10/90							
	4/30/91							
	6/28/91							
SG-02	4/16/90	N						
	5/01/90	N						
	5/16/90	N						
	5/31/90	N						
	6/12/90	N						
	6/25/90	N						
	7/13/90	N						
	8/13/90	N						
	9/13/90	N						
	10/11/90	N						
	11/12/90	N						
	12/10/90	N						
	4/30/91	N						
	6/28/91	N						
SHC	7/26/89	N						
	7/26/89	DUP						
SR-A	4/23/90	N						
SR-B	4/23/90	N						

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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COMMON IONS(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	CALCIUM	MAGNESIUM	SODIUM	POTASSIUM	CHLORIDE	SULFATE
SR-C	4/23/90	N						
SR-D	4/23/90	N						
SR-E	4/23/90	N						
SR-F	4/23/90	N						
SR-G	4/23/90	N						
UN ADIT	6/01/95	N	79.0	4.0	1.0 UFA	1.0 U	1 U	17
	6/21/95	N						
UQG	5/24/90	N						
WSN-07	8/17/94	N	8.0	1.0	2.0	1.0 U	1 U	4
	10/12/94	N						
BLANK	3/28/90	FB	1.0 U	1.0 U	1.0 U		1 U	
	6/27/90	FB	1.0 U	1.0 U	1.0 U		1 U	
	12/10/90	FB	1.0 U	1.0 U	1.0 U		1 U	
	3/18/91	FB	1.0 U	1.0 U	1.0 U		1 U	
	5/12/92	FB	1.0 U	1.0 U	1.0 U		1 U	
	5/03/94	FB	1.0 U	1.0 U	1.0 U		1 U	
	8/17/94	FB	1.0 U	1.0 U	1.0 U		1 U	
BLIND FIELD	6/15/90	BFS	1.0 U	1.0 U	234.0	142.0	241	158
	10/12/94	BFS	20.0	1.0 U	252.0	33.0	164	82

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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COMMON IONS(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	CALCIUM	MAGNESIUM	SODIUM	POTASSIUM	CHLORIDE	SULFATE	COMMON IONS(1)	
									-----	-----
BLIND FIELD	3/22/95	BFS	56.0	-----	386.0	38.0	360	35		
	5/31/95	BFS	42.0	1.0 U	273.0	38.0	223	59		

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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NUTRIENTS(1)					
STATION	SAMPLE DATE	SAMPLE TYPE(2)	NITRATE + NITRATE AS N	KJELDAHL NITROGEN	AMMONIA
BARREL	5/25/95	N	.05 U		
ELKHC	5/31/90	N	.05 U	.10 UJP	.10 U
GBG	7/26/89	N	.05	.20	.10 U
GFSW-01	9/21/89	N	.10	.10 JX	.10 U
	10/05/89	N	.08	.20	.10 U
	3/27/90	N	.05 JP	.20	.10 U
	4/09/90	N	.05 U	.10 UJP	.10 U
	4/30/90	N	.05 U	.10 UJP	.10 U
	5/16/90	N	.05 U	.10 UJP	.10 U
	5/29/90	DUP	.05 U	.10	.10 UJP
	5/29/90	N	.05 URA	.20 JP	.10 U
	6/11/90	N	.05 U	.22	.20 U
	6/26/90	RLS	.05 U	.10 UJP	.10 U
	6/26/90	N	.05 U	.10	.10 U
	7/12/90	N	.05 U	.10	.10 U
	8/13/90	N			
	10/10/90	RLS	.05 U	.20 U	.20 U
	10/10/90	N	.05 U	.10 U	.10 U
	4/30/91	N			
	5/30/91	RLS	.05 U	.20 U	.06
	5/30/91	N	.05 U	.30	.10 U
	6/28/91	N	.05 U	.10 UJP	.10 U
	9/16/91	N	.06		
	12/07/92	N			

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate range (PQL-based); F% - field duplicate relative percent difference outside acceptable limits; P - reference lab split relative percent difference outside acceptable limits; H - holding time exceeded.

A - blind field standard results outside acceptable limits; A - blind field standard contamination blank.

NOTE: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate range (PQL-based); F% - field duplicate relative percent difference outside acceptable limits; P - reference lab split relative percent difference outside acceptable limits; H - holding time exceeded.

A - blind field standard results outside acceptable limits; A - blind field standard contamination blank.

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NUTRIENTS(1)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	NITRATE + NITRITE AS N	KJELDHAL NITROGEN	AMMONIA	ORTHO-PHOSPHATE	TOTAL PHOSPHOROUS
GFSW-01	1/20/93	N	.09			.10 U	.020
	2/03/93	N	.10			.10 U	.070
	2/18/93	N	.10			.10 U	.150 JF%
	3/04/93	N	.10			.10 U	.060
	3/04/93	DUP	.11			.10 U	.070
	4/29/93	N	.05	.10 U		.070 JF%	.070
	10/06/93	N	.05 U	.10 U		.070 JX	.090
	5/03/94	N	.02	.10 U		.040 JX	.080
	8/17/94	N	.03	.10 U		.060	.090
	10/11/94	N	.07 JX	.20 UJF		.030 JHX	.040 JF% X
	3/22/95	N	.05	.10 U		.05 U	.010 U
	6/01/95	N	.05 U	.20 UJF		.05 U	.028
	9/21/89	N	.05 U		.10 U	.010	.020
	10/05/89	N			.10 U		
	3/27/90	N	.14	.10 JX		.10 U	.050
	3/27/90	DUP	.13	.10		.10 U	.040
	4/09/90	N	.10	.20		.10 U	.020
	4/30/90	N	.05 UJP	.10 U		.10 UJP	.030
	4/30/90	DUP	.05	.10		.10 U	.020
	5/16/90	N	.05	.10 UJP		.10 U	.040
	5/29/90	RLS	.02	.27		.05 U	.080
	5/29/90	N	.05 U	.90 JP		.10 U	.030 JFP
	6/11/90	N	.05 URA	.10 UJP		.10 U	.040
	6/25/90	N	.05 U	.10 JP		.10 U	.020 JP
	7/09/90	N	.05 U	.10		.10 U	.020
	7/13/90	N					

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; A - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

5) Results from the 10/94 sampling flagged JX are qualified on the basis of a groundwater cross-contamination blank.

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NUTRIENTS(1)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	NITRATE + NITRITE AS N	KJELDHAL NITROGEN	AMMONIA	ORTHOPHOSPHATE	TOTAL PHOSPHORUS
GFSW-02	10/11/90	N	.05 U	.10 U	.10 U	.010 UJP	.010 UJP
	4/30/91	N	.05 U	.30	.10 U	.040	.040
	5/30/91	N	.05 U				
	6/28/91	N					
	9/16/91	RLS	.07	.21	.05 U	.050	.050
	9/16/91	N	.05 U	.10 UJP	.10 U	.090 JP	.110 JP
	5/12/92	N	.08 JP	.60 JP	.10 U	.110 JP	.180 JP
	5/12/92	DUP	.05 U	.50	.10 U	.100	.150
	4/29/93	N	.08	.10 U	.10 U	.060	.100
	10/06/93	N	.05 U	.10 U	.10 U	.080 JF%	.120
	4/19/94	N	.10			.090	
	4/19/94	DUP	.10			.080	
	5/03/94	N	.03	.10 U	.05 U	.050	.100
	8/17/94	RLS					
	8/17/94	N	.03	.10 U	.05 U	.070	.150
	10/11/94	N	.07 JX	.34 JF	.05 U	.040 JHX	.090 JF%
	10/11/94	DUP	.06	.20 U	.05 U	.040 JH	.070
	3/22/95	N	.13	.10 U	.05 U	.014	.015
	5/31/95	N	.05 U	.23 JF	.05 U	.010 U	.029
	9/27/89	N	.10	.30	.10 U	.010 U	.010
	3/27/90	N	.20	.10 U	.10 U	.010 U	.020 JF%
	4/16/90	N	.36	.10	.10 U	.010 U	.010 U
	4/30/90	N	.22 JP	.10 U	.10 U	.010 UJP	.010 U
	5/16/90	N	.21	.10 UJP	.10 U	.010 U	.010
	5/29/90	N	.22	.10 UJP	.10 U	.010 UJP	.020 JFP
	6/11/90	N	.26 RA	.10 UJP	.10 U	.010 U	.010

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

5) Results from the 10/94 sampling flagged JX are qualified on the basis of a groundwater cross-contamination blank.

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	NUTRIENTS(1)				TOTAL PHOSPHOROUS
			NITRATE + NITRITE AS N		KJELDAHL NITROGEN	AMMONIA	
			NITRATE	NITRITE		ORTHOPHOSPHATE	
GFSW-03	6/25/90	N	.22		.10 UJP	.10 U	.010 UJP
	7/09/90	N	.18		.10 U	.10 U	.010 U
	10/10/90	N	.16		.10 U	.10 U	.010 UJP
	4/30/91	N					
	6/28/91	N					
GFSW-04	9/22/89	N	.63		.10 U	.10 U	.010 U
	5/29/90	N	.07		.10 UJP	.10 U	.010 UJP
	5/31/90	N					
	6/11/90	N	.06 RA		.30 JP	.10 U	.010 U
	6/26/90	N	.05 U		.10 UJP	.10 U	.010 UJP
	6/26/90	DUP	.05 U		.10 U	.10 U	.010 U
	7/12/90	N	.05 U		.10 U	.10 U	.010 U
	10/10/90						
	4/30/91						
GFSW-05	10/04/89	N	.05 U		.10 U	.10 U	.010 U
	3/27/90	N	.12		.30 JX	.10 U	.050
	4/09/90	N	.24		.20	.10 U	.010 U
	4/23/90	N					
	5/01/90	RLS	.05		.20		.100
	5/01/90	N	.83 JP		.10	.10 U	.010 JP
	5/17/90	N	.05 U		.20 JP	.10 U	.010 U
	5/30/90	N	.05 U		.10 UJP	.10 U	.020 JP
	6/12/90	N	.09 RA		.10 UJP	.10 U	.010
	6/25/90	N	.05 U		.10 JP	.10 U	.010 UJP
	7/12/90	N	.05 U		.10	.10 U	.010 U

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

5) Results from the 10/94 sampling flagged JX are qualified on the basis of a groundwater cross-contamination blank.

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	NUTRIENTS(1)				
			NITRATE + NITRITE AS N	KJELDAHL NITROGEN	AMMONIA	ORTHOPHOSPHATE	TOTAL PHOSPHOROUS
GFSW-05	8/13/90	N	.05 U	.30	.10 U	.010 UJP	.010 JP
	10/11/90	N					
	11/12/90	N					
	4/30/91	N					
5/30/91	N	.21		.10 U	.10 U	.010	.020
6/28/91	N						
9/17/91	N	.13		.10 UJP	.10 U	.100 JP	.140 JP
5/12/92	RLS	.16		.20 U	.05 U	.020 U	.020 U
5/12/92	N	.06 JP		.50 JP	.10 U	.090 JP	.180 JP
4/29/93	N	.05 U		.10 U	.10 U	.070	.080
4/29/93	DUP	.05 U		.10 U	.10 U	.060	.080
10/06/93	N	.05 U		.10 U	.10 U	.080 JF%	.140
4/19/94	N	.09					
5/03/94	DUP	.05		.10 U	.05 U	.110	.130
5/03/94	N	.05		.10 U	.05 U	.120	.130
8/17/94	RLS						
8/17/94	N	.10		.10 U	.05 U	.070	.140
8/17/94	DUP	.10		.10 U	.05 U	.080	.130
10/11/94	N	.07 JX		.20 UJF	.05 U	.020 JHX	.020 JF%X
3/22/95	N	.09		.11	.05	.012	.014
5/31/95	N	.06		.21 JF	.05 U	.014	.068
GFSW-06	10/04/89	N	.05 U	.20	.10 U	.010 U	.020
	3/27/90	N	.05 U	.10 U	.10 U	.010 U	.010 JF%
	4/16/90	N	.05 U	.10 U	.10 U	.010 U	.020
	4/16/90	DUP	.05 U	.10 U	.10 U	.010 U	.020
	4/23/90	N					

NOTES:

- 1) All values are given in mg/L unless otherwise noted.
- 2) Sample Type: N - natural; DUP - field duplicate; BES - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.
- 3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.
- 4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.
- 5) Results from the 10/94 sampling flagged JX are qualified on the basis of a groundwater cross-contamination blank.

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NUTRIENTS(1)									
STATION	SAMPLE DATE	SAMPLE TYPE(2)	NITRATE + NITRITE AS N		KJELDAHL NITROGEN	AMMONIA	ORTHOPHOSPHATE		TOTAL PHOSPHOROUS
			.05 UJP	.05 U			.10 U	.010 UJP	
GFSW-06	5/01/90	N	.05 UJP	.20	.10 U	.010 UJP	.010 U	.010 U	
	5/16/90	RLS	.05 U	.16	.05 U	.005 U	.005 U	.008	
	5/17/90	N	.05 U	.40 JP	.10 U	.010 U	.010 U	.020	
	5/30/90	N	.05 U	.10 UJP	.10 U	.010 JP	.020 JFP		
	6/12/90	N	.05 URA	.10 UJP	.10 U	.010 U	.010 U		
	6/25/90	N	.05 U	.20 JP	.10 U	.010 UJP	.010 UJP		
	7/12/90	N	.05 U	.20	.10 U	.010	.010	.010	
	8/13/90	N							
	9/13/90	N	.05 U	.30	.10 U	.010 UJP	.010 UJP		
	10/11/90	N							
	11/12/90	N							
	4/30/91	N	.05 U	.10	.10 U	.020	.020	.040	
	5/30/91	N							
	6/28/91	N	.05 U	.10 UJP	.10 U	.130 JP	.130 JP		
	9/17/91	N	.05 U	.20 JP	.10 U	.100 JP	.100 JP	.180 JP	
	5/12/92	N	.07 JP						
	6/11/92	N							
	4/29/93	N	.05 U	.10 U	.10 U	.070	.070	.070	
	6/14/93	N							
	10/07/93	N	.05 U	.10 U	.10 U	.080 JF%	.080 JF%	.140	
	5/03/94	N	.01 U	.30	.05 U	.040 JX	.040 JX	.080	
	8/17/94	N	.01 U	.10 U	.05 U	.080	.080	.140	
	10/11/94	N	.05 U	.20 UJF	.05 U	.030 JHX	.030 JHX	.030 JFX	
	3/22/95	N	.05 U	.10 U	.05 U	.016	.016		
	5/31/95	N	.05 U	.56 JF	.08	.010 U	.010 U	.019	
	GFSW-07								
	10/06/89	N	.05 U	.10	.10 U	.010 U	.010 U	.030	

- NOTES: 1) All values are given in mg/L unless otherwise noted.
 2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.
 3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.
 4) Data Descriptors: F - field duplicate range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split relative percent difference outside acceptable range; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.
 r1 Data splits from the 10/94 sampling flagged JX are qualified on the basis of a groundwater cross-contamination blank.

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NUTRIENTS(1)						
STATION	SAMPLE DATE	SAMPLE TYPE(2)	NITRATE + NITRITE AS N	KJELDAHL NITROGEN	AMMONIA	ORTHO-PHOSPHATE
GFSW-07	3/27/90	N	.05 U	.10 JX	.10 U	.010 U
	4/16/90	N	.05	.10	.10	.010 U
	5/01/90	N	.05 UJP	.40	.10 U	.010 UJP
	5/16/90	N	.05 U	.30 JP	.10 U	.010 U
	5/31/90	N	.05 U	.10 UJP	.10 U	.010 UJP
	6/12/90	N	.05 URA	.10 UJP	.10 U	.010 U
	6/12/90	DUP	.05 U	.10 U	.10 U	.010 U
	6/25/90	N	.05 U	.30 JP	.10 U	.010 UJP
	7/12/90	N	.05 U	.10	.10 U	.040
	8/13/90	N	.05 U	.30	.10 U	.010 UJP
	10/11/90	N				.010 UJP
	11/12/90	N				
	12/10/90	N				
	4/30/91	N	.05 U	.30	.10 U	.010 U
	5/30/91	N				
	6/28/91	N				
	9/16/91	N	.05 U	.10 UJP	.10 U	.100 JP
	4/29/93	N	.05 U	.10 U	.10 U	.060
	10/07/93	N	.05 U	.10 U	.10 U	.060 JF%
	10/07/93	DUP	.05 U	.10 U	.10 U	.090
	4/19/94	N	.05 U			.060
	5/03/94	N	.01 U	.20	.05 U	.100
	8/17/94	RLS				
	8/17/94	N	.01 U	.10 U	.05 U	.060
	10/11/94	N	.05 U	.20 UJP	.05 U	.020 JHX
	5/31/95	N	.05 U	.20 UJP	.05 U	.016

- NOTES: 1) All values are given in mg/L unless otherwise noted.
 2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.
 3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.
 4) Data Descriptors: F - field duplicate range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split relative percent difference outside acceptable limits; H - holding time exceeded.
 r\ No sample from the 10/94 sampling flagged JX are qualified on the basis of a groundwater cross-contamination blank.

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	NUTRIENTS(1)			
			NITRATE + NITRITE AS N	KJELDAHL NITROGEN	AMMONIA	ORTHOPHOSPHATE
GFSW-08	10/06/89	N	.05 U	.10 U	.10 U	.010 U
	3/26/90	N	.05 U	.20 JX	.10 U	.010 U
	4/16/90	N	.05 U	.10	.10 U	.010 U
	5/01/90	N	.05 UJP	.20	.10 U	.010 UJP
	5/16/90	N	.05 U	.30 JP	.10 U	.010 U
	5/31/90	N	.05 U	.10 UJP	.10 U	.010 UJP
	6/12/90	N	.05 URA	.10 JP	.10 U	.010 U
	6/25/90	N	.05 U	.20 JP	.10 U	.010 UJP
	7/12/90	N	.05 U	.10	.10 U	.010 U
	8/13/90	N				
	9/13/90	N				
	10/11/90	N	.05 U	.10 U	.10 U	.010 UJP
	11/12/90	N				
	12/10/90	N				
	4/30/91	N				
	5/30/91	N	.05 U	.30	.10 U	.010 U
	6/28/91	N				
	9/17/91	N	.05 U	.10 UJP	.10 U	.090 JP
	4/29/93	N	.05 U	.10 U	.10 U	.070
	10/07/93	N	.05 U	.10 U	.10 U	.070 JF%
	4/19/94	N	.05 U			.140
	5/03/94	N	.01 U	.10 U	.05 U	.090
	8/17/94	RLS				.040 JX
	8/17/94	N	.01 U	.10 U	.05 U	.900
	10/11/94	N	.05 U	.20 UJP	.05 U	.020 JHK
	5/31/95	N	.05 U	.44 JF	.05 U	.010 U
						.041

NOTES:

- 1) All values are given in mg/L unless otherwise noted.
- 2) Sample Type: N - natural; DUP - field duplicate; BLS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.
- 3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.
- 4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.
- 5) Results from the 10/94 sampling flagged JX are qualified on the basis of a groundwater cross-contamination blank.

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NUTRIENTS(1)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	NITRATE + NITRITE AS N	KJEDLAHL NITROGEN	AMMONIA	ORTHOPHOSPHATE	TOTAL PHOSPHOROUS
GFSw-09	10/06/89	N	.05 U	.10 U	.10 U	.010 U	.020
	3/26/90	N	.10	.10 U	.10 U	.010	.010 UJP%
	4/16/90	N	.05 U	.10	.10 U	.010 U	.030
	5/01/90	N	.07 JP	.10	.10 U	.010 UJP	.010
	5/16/90	N	.06	.30 JP	.10 U	.010 U	.030
	5/31/90	N	.05 U	.10 UJP	.10 U	.010 UJP	.010 UJP
	6/12/90	N	.06 RA	.10 JP	.10 U	.010 U	.010 U
	6/25/90	N	.05 U	.20 JP	.10 U	.010 UJP	.030 JP
	7/13/90	N	.05 U	.10 U	.10 U	.010 U	.020
	8/13/90	N					
	10/11/90	N	.05 U	.10 U	.10 U	.010 UJP	.010 UJP
	11/12/90	N					
	12/10/90	N					
	4/30/91	N	.05 U	.20	.10 U	.020	.020
	5/30/91	N					
	6/28/91	N					
	9/17/91	N	.05 U	.10 UJP	.10 U	.110 JP	.340 JP
	5/12/92	N	.05 UJP	.20 JP	.10 U	.100 JP	.160 JP
	12/07/92	N	.07		.10 U		.130
	1/20/93						
	2/03/93						
	2/18/93	N	.09		.10 U		.030
	3/04/93	N	.09		.10 U		.070 JF%
	10/06/93	N	.05 U	.10 U		.110 JF%	.140
	4/19/94	N	.05 U			.070	
	5/03/94	N	.04	.20	.05 U	.080	.110
	8/17/94	RLS					

NOTES:

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- 2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.
- 3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.
- 4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.
- 5) Results from the 10/94 sampling flagged JX are qualified on the basis of a groundwater cross-contamination blank.

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	NUTRIENTS(1)			
			NITRATE + NITRITE AS N	KJEDLAHL NITROGEN	AMMONIA	ORTHOPHOSPHATE
GFSW-09	8/17/94	N	.03	.10 U	.05 U	.060
	10/11/94	N	.05 JX	.20 UJP	.05 U	.020 JHX
	5/31/95	N	.05 U	.33 JF	.05 U	.010 U
GFSW-10	9/20/89	N	.23	.10 U	.10 U	.010 U
	9/29/89	N				.010 U
	3/26/90	N	.26	.10 U	.10 U	.010 U
	4/16/90	N	.32	.10 U	.10 U	.010 U
	4/30/90	N	.70 JP	.30	.10 U	.010 UJP
	5/16/90	N	.71	.20 JP	.10	.010 U
	5/29/90	N	.60	.20 JP	.10 U	.010 UJP
	6/11/90	N	.69 RA	.10 UJP	.10 U	.010 U
	6/26/90	N	.79	.10 JP	.10 U	.010 UJP
	7/12/90	N	.71	.10	.10 U	.010 U
	10/10/90	N	.40	.30	.10 U	.010 UJP
	4/30/91	N				.010 UJP
	6/28/91	N				
GFSW-11	9/21/89	N	.05 U	.30	.10 U	.010 U
	10/05/89	N				.020
	3/26/90	N	.10	.10 U	.10 U	.010 U
	4/09/90	N	.08	.20	.10 U	.010 U
	4/30/90	N	.10 JP	.90	.10 U	.010 UJP
	5/16/90	N	.05	.10 JP	.10 U	.010 U
	5/16/90	DUP	.05	.10 U	.10 U	.010 U
	5/29/90	N	.05 U	.10 JP	.10 U	.010 UJP
	6/11/90	RLS	.05 U	.80	.10 U	.020 U

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

5) Results from the 10/94 sampling flagged JX are qualified on the basis of a groundwater cross-contamination blank.

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NUTRIENTS(1)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	NITRATE + NITRITE AS N	KJELDAHL NITROGEN	AMMONIA	ORTHOPHOSPHATE	TOTAL PHOSPHOROUS
GFSW-11	6/11/90	N	.05 URA	.20 JP	.10 U	.010 U	.010 U
	6/26/90	N	.06	.10 JP	.10 U	.010 UJP	.030 JP
	7/12/90	N	.05	.10 U	.10 U	.010 U	.010
	8/13/90	N					
	10/10/90	N	.06	.20	.10 U	.010 UJP	.010 UJP
	11/12/90	N					
	12/10/90	N					
	4/30/91						
	6/28/91	N					
	12/07/92	N	.05		.10 U		.130
	1/20/93	N	.07		.10 U		.090
	2/03/93	N					
	2/18/93	N	.08		.10 U		.040
	3/04/93	N	.07		.10 U		.070 JF%
	3/05/93	RLS	.09		.05 U		.080
	10/12/94	N	.05 JX	.20 UJF	.05 U	.020 JHX	.020 JF%X
	5/31/95	N	.05 U	.45 JF	.05 U	.010 U	.097
	4/18/90	N	.05 U	.10 U	.10 U	.010	.030
	5/01/90	N	.05 UJP	.20	.10 U	.010 UJP	.010 U
	5/18/90	N	.05 U	.30 JP	.10 U	.010	.020
	5/31/90	N	.05 U	.10 UJP	.10 U	.010 JP	.040 JFP
	6/12/90	N	.05 URA	.10 UJP	.10 U	.010	.030
	6/26/90	N	.05 U	.10 JP	.10 U	.010 UJP	.020 JP
	7/13/90	N	.05 U	.10 U	.10 U	.020	.020
	8/13/90	N					
	9/13/90	N					

NOTES:

- 1) All values are given in mg/L unless otherwise noted.
- 2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.
- 3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.
- 4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.
- 5) Results from the 10/94 sampling flagged JX are qualified on the basis of a groundwater cross-contamination blank.

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NUTRIENTS(1)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	NITRATE + NITRITE AS N	KJELDAHL NITROGEN	AMMONIA	ORTHOPHOSPHATE	TOTAL PHOSPHOROUS
GFSW-12	10/11/90	N	.05 U	.10	.10 U	.010 UJP	.010 UJP
	12/10/90	N	.05 U	.10 U	.10 U	.010 U	.010 U
	3/18/91	N	.05 U	.10 U	.10 U	.010 U	.230
	4/30/91	N	.05 U	.10	.10 U	.010 U	.010 U
	5/30/91	N	.05 U	.10	.10 U	.010 U	.010 U
	6/28/91	N	.05 U	.10 UJP	.10 U	.100 JP	.210 JP
	9/17/91	N	.05 U	.40 JP	.10 U	.100 JP	.160 JP
	5/12/92	N	.05 UJP	.10 U	.10 U	.080	.080
	4/29/93	N	.05 U	.10 U	.10 U	.080 JF%	.180
	10/06/93	N	.05 U	.10 U	.10 U	.080	.100
	5/03/94	N	.01 U	.10 U	.05 U	.050	.160
	8/16/94	N	.02	.10 U	.05 U	.010 JHX	.020 JF%X
	10/11/94	N	.05 U	.20 UJF	.05 U	.011	.021
	3/22/95	N	.05 U	.15	.05 U	.010 U	.032
	6/01/95	N	.05 U	.42 JF	.05 U	.010 U	.010 U
	4/29/93	N	.05 U	.10 U	.10 U	.060	.060
	10/07/93	N	.05 U	.10 U	.10 U	.070 JF%	.120
	4/19/94	N	.05 U			.070	
	8/17/94	N	.05 U			.050	
	10/11/94	N	.05 U	.20 UJF	.05 U	.010 JHX	.010 JF%X
	5/31/95	N	.05 U	.25 JF	.05 U	.010 U	.029
	4/29/93	N	.05 U	.10 U	.10 U	.060	.070
	10/06/93	N	.05 U	.10 U	.10 U	.080 JF%	.160
	5/03/94	N	.01 U	.10 U	.05 U	.090	.120

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3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

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5) Results from the 10/94 sampling flagged JX are qualified on the basis of a groundwater cross-contamination blank.

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NUTRIENTS(1)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	NITRATE + NITRITE AS N	KJELDAHL NITROGEN	AMMONIA	ORTHO-PHOSPHATE	TOTAL PHOSPHOROUS
GFSW-15	8/16/94	N	.01 U	.10 U	.05 U	.080	.170
	10/11/94	N	.05 U	.20 UJF	.05 U	.040 JHK	.040 JF%X
	3/22/95	N	.05 U	.10 U	.05 U	.022	.031
	3/22/95	D	.05 U	.10	.05 U	.023	.034
	6/01/95	N	.05 U	.37 JF	.05 U	.022	.052
GFSW-16	4/28/94	N	.05 U				
	5/03/94	N	.01 U	.10 U	.05 U	.060	
	6/04/94	N				.060	.080
	8/17/94	RLS					
	8/17/94	N	.01 U	.10 U	.05 U	.050	.110
	10/11/94	N	.05 U	.20 UJF	.05	.020 JHK	.020 JF%X
	3/22/95	N	.05 U	.10 U	.05 U	.014	.014
	6/01/95	N	.05 U	.31 JF	.05 U	.010	.050
GFSW-17	6/04/94	N	.01 U	.10 U	.05 U	.050	.050
	8/17/94						
	10/11/94	N	.14	1.15 JF	.05 U	.039	.191
	6/01/95	N	.05 U	.25 JF	.05 U	.014	.060
GFSW-18	6/01/95	N	.05 U				
	6/01/95	N					
GFSW-19	6/01/95	N	.05 U	.22 JF	.05	.019	.085
GFSW-20	6/01/95	N	.05 U	.55 JF	.10	.010 U	.074
	6/01/95	D	.05 U	.29	.05 U	.010 U	.079

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3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

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NUTRIENTS(1)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	NITRATE + NITRITE AS N	KJELDAHL NITROGEN	AMMONIA	ORTHO-PHOSPHATE	TOTAL PHOSPHOROUS
LQG	5/24/90	N	.05 U	.40	.10 U	.020	.030
	5/31/90	N					
	6/11/90	N	.05 URA	.10 UJP	.10 U	.010 U	.020
MH-01	5/25/95	N	14.80	1.63	.05 U	.030	.030
MH-03	6/05/94	N	74.80	2.20	1.20	.040	.140
	5/25/95	N	115.00	1.37	.61	.020	.040
SDC	7/26/89	N					
SG-01	5/29/90	N					
	5/31/90	N					
	6/11/90	N					
	6/25/90						
	10/10/90						
	4/30/91						
	6/28/91						
SG-02	4/16/90	N					
	5/01/90	N					
	5/16/90	N					
	5/31/90	N					
	6/12/90	N					
	6/25/90	N					
	7/13/90	N					
	8/13/90	N					

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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NUTRIENTS(1)

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STATION	SAMPLE DATE	SAMPLE TYPE (2)	NITRATE + NITRITE AS N	KJELDAHL NITROGEN	AMMONIA	ORTHO-PHOSPHATE	TOTAL PHOSPHOROUS
SG-02	9/13/90	N					
	10/11/90	N					
	11/12/90	N					
	12/10/90	N					
	4/30/91	N					
	6/28/91	N					
SHC	7/26/89	N					
	7/26/89	DUP					
SR-A	4/23/90	N					
SR-B	4/23/90	N					
SR-C	4/23/90	N					
SR-D	4/23/90	N					
SR-E	4/23/90	N					
SR-F	4/23/90	N					
SR-G	4/23/90	N					
UN ADIT	6/01/95	N	.08		.20 UJF	.05 U	.010 U
	6/21/95	N					.010 U

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NUTRIENTS(1)						
STATION	SAMPLE DATE	SAMPLE TYPE(2)	NITRATE + NITRITE AS N	KJELDHAL NITROGEN	AMMONIA	ORTHO-PHOSPHATE
UQ6	5/24/90	N				
WSW-07	8/17/94	N	.05 U			
	10/12/94	N	.05 U			
BLANK	3/28/90	FB	.05 U	.10	.10 U	.010 U
	6/27/90	FB	.05 U	.10 U	.10 U	.010 U
	12/10/90	FB	.05 U	.20	.10 U	.010 U
	3/18/91	FB	.05 U	.10 U	.10 U	.010 U
	5/12/92	FB	.05 U	.10 U	.10 U	.020
	5/03/94	FB	.01 U	.10 U	.05 U	.010 U
	8/17/94	FB	.01 U	.10 U	.05 U	.010
BLIND FIELD	6/15/90	BFS	2.89	9.30	.010 U	.005 U
	10/12/94	BFS	8.40			
	3/22/95	BFS	8.85			
	5/31/95	BFS	11.40			

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3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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TOTAL RECOVERABLE TRACE METALS(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	ALUMINUM	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	IRON
BARREL	5/25/95	N	.2	.005 U	.003	.100 U	.001 U	.0012	.001 U	.076	.27
ELKHC	5/31/90	N	.7		.016	.100 U		.0010 UJFP	.020 U	.010 U	.54 JP%F%
GBG	7/26/89	N									
GFSW-01	9/21/89	N	.1 U		.005	.100 U			.0010 U	.020 U	.010 U
	10/05/89	N									.06
	3/27/90	N	.1 U		.006 JF	.100 U			.0010 U	.020 U	.010 U
	4/09/90	N	.1 U		.005	.100 U			.0010 U	.020 U	.010 U
	4/30/90	N	.1 UJP%		.005	.100 U			.0010 UJP%	.020 U	.010 U
	5/16/90	N	.3		.005	.100 U			.0001 U	.020 U	.010 U
	5/29/90	N	.2		.005	.100 U			.0030 JFF	.020 U	.010 U
	5/29/90	DUP	.2		.005 U	.100 U			.0010 U	.020 U	.010 U
	6/11/90	N	.4		.005 U	.100 U			.0010 U	.020 U	.010 U
	6/26/90	RLS									.39
	6/26/90	N	.2		.005 U	.100 U			.0010 U	.020 U	.010 U
	7/12/90	N	.1 U		.005 U	.100 U			.0010 U	.020 U	.010 U
	8/13/90	N									.21
	10/10/90	RLS									.11
	10/10/90	N	.1 U		.005 U	.100 U			.0010 U	.020 U	.010 U
	4/30/91	N									.07
	5/30/91	RLS	.1		.005 U	.100 U			.0002	.020 U	.020 U
	5/30/91	N	.1 U		.005 U	.100 U			.0010 U	.020 U	.010 U
	6/28/91	N									.08 JP
	9/16/91	N	.1 U		.005 U	.100 U			.0001 U	.020 U	.001 U
	12/07/92	N			.005 U	.100 U			.0001 U	.020 U	.001 U
											.03 U

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2) Sample Type: N - natural; DUP - field standard; BFS - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; A - blind field contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

5) Metals results reported for the 6/94 sampling of MH-03 are dissolved metals.

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TOTAL RECOVERABLE TRACE METALS(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	ALUMINUM	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	IRON
GFSW-01	1/20/93	N			.005			.0001 U		.0001 U	.03 U
	2/03/93	N									
	2/18/93	N			.008			.0001 U		.002	.06
	3/04/93	N			.006			.0001 U		.001 U	.03 U
	3/04/93	DUP			.005 U	.004		.0001 U		.0001 U	.03 U
	4/29/93	N	.1	U	.005 U	.005 U		.001 U		.001 U	.03
	10/06/93	N	.1	U	.005 U	.003		.001 U		.001 U	.03 U
	5/03/94	N	.1	U	.005 U	.003 JX		.001 U		.001 U	.03 U
	8/17/94	N	.3	JF%	.005 U	.004		.0001 JFX		.001 U	.06 UJF%
	10/11/94	N	.4		.005 U	.001 U		.0001 U		.001 U	.09 JF
	3/22/95	N	.1	U	.005 U	.007		.001 U		.001 U	.55 JA
	6/01/95	N	.1	UJF%A	.005 U	.002		.001 U		.001 U	1.50 JF%
	9/21/89	N	.1	U		.008		.0001 U		.001 U	.19
	10/05/89	N									
	3/27/90	N	3.3		.230 JF	.100 U		.0009 JX		.020 U	.087
	3/27/90	DUP	3.7		.028	.100 U		.0010		.020 U	.090
	4/09/90	N	.9		.013	.100 U		.0010		.020 U	.020
	4/30/90	N	.2	JP%		.006		.0010 UJP%		.020 U	.24 JP%
	4/30/90	DUP	2			.007		.0010 U		.020 U	.010 U
	5/16/90	N	.9			.008		.0010 U		.020 U	.020
	5/29/90	RLS	.5			.008		.0050		.020 U	.020 U
	5/29/90	N	.5			.010		.0010 UJFP		.020 U	.010
	6/11/90	N	6			.007		.0010		.020 U	.010
	6/25/90	N	2			.005 U		.0020		.020 U	.020
	7/09/90	N	.1	U		.005 U		.0010 U		.020 U	.010 U
	7/13/90	N									.09

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3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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TOTAL RECOVERABLE TRACE METALS(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	ALUMINUM	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	IRON
GFSW-02	10/11/90	N	.1 U		.006	.100 U		.0010 U	.020 U	.010 U	.10
	4/30/91	N									
	5/30/91	N	.5		.009	.100 U		.0010 U	.020 U	.010	.50 JP
	6/28/91	N									
	9/16/91	RLS									
	9/16/91	N	.1 U		.005	.100 U		.0003	.020 U	.002	.05
	5/12/92	N	.1 U		.006	.100 U		.0020	.020 U	.010 U	.15 JF
	5/12/92	DUP	.1 U		.005 U	.100 U		.0001 U	.020 U	.001 U	.27
	4/29/93	N	.1 U		.005 U	.007	.100 U	.001 U	.0001 U	.004	.09
	10/06/93	N	.1 U		.005 U	.004	.100 U	.001 U	.0001 U	.004	.05
	4/19/94	N			.034			.0005		.090	
	4/19/94	DUP			.032			.0005		.090	
	5/03/94	N	.1 U		.005 U	.004 JX	.100 U	.001 U	.0001 UJF	.001 U	.004 JF%
	8/17/94	RLS			.007			.0001 U		.012	
	8/17/94	N	1.4 JF%		.005 U	.007	.100 U		.0001 U	.011 JF	
	10/11/94	N	.9		.005 U	.005 JA	.100 U	.001 U	.0001 U	.014 JF%	.43 JF
	10/11/94	DUP	.9		.005 U	.005	.100 U	.001 U	.0002	.001 U	.014 JA
	3/22/95	N	.1 U		.005 U	.007	.100 U	.001 U	.0001 UJA	.001 U	.018
	5/31/95	N	.1 JF%A		.005 U	.004	.100 U	.001 U	.0001 UJFA	.001 U	.004
										.002	.17
GFSW-03	9/27/89	N	.1 U		.006	.100 U		.0010	.020 U	.010 U	.03 U
	3/27/90	N	.1 U		.005 UJF	.100 U		.0020 JX	.020 U	.010 U	.03 U
	4/16/90	N	.1 U		.005 U	.100 U		.0010 U	.020 U	.010 U	.03 U
	4/30/90	N	.1 UJP%		.005 U	.100 U		.0010 UJP%	.020 U	.010 U	.03 UJP%
	5/16/90	N	.0 U		.005 U	.100 U		.0010 U	.020 U	.010 U	.03 U
	5/29/90	N	.1 U		.006	.100 U		.0010 UJFP	.020 U	.010 U	.03 UJP%F
	6/11/90	N	.1		.005 U	.100 U		.0010 U	.020 U	.010 U	.04

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3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

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TOTAL RECOVERABLE TRACE METALS(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	ALUMINUM	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	IRON
GFSW-03	6/25/90	N	.2		.007	.100 U			.0010 U	.010 U	.05 JP%F%
	7/09/90	N	.1 U		.005 U	.100 U			.0010 U	.010 U	.03 U
	10/10/90	N	.1 U		.005 U	.100 U			.0010 U	.010 U	.03 U
	4/30/91	N									
	6/28/91	N									
GFSW-04	9/22/89	N	.1 U		.012	.100 U			.0010 U	.010 U	.03 U
	5/29/90	N	.1 U		.007	.100 U			.0010 UJFP	.010 U	.010 U
	5/31/90	N									
	6/11/90	N	.2		.006	.100 U			.0020	.010 U	.08
	6/26/90	N	.1 U		.008	.100 U			.0010 U	.010 U	.03 U
	6/26/90	DUP	.1 U		.006	.100 U			.0010 U	.010 U	.03 U
	7/12/90	N	.1 U		.008	.100 U			.0010 U	.100 U	.03 U
	10/10/90										
	4/30/91										
GFSW-05	10/04/89	N	.2		.018	.100 U			.0120	.030	.31
	3/27/90	N	.6		.028 JF	.100 U			.0330	.084	.86
	4/09/90	N	.4		.014	.100 U			.0110	.030	.37
	4/23/90	N									
	5/01/90	RLS	1.0		.031	.100 U			.0320	.070	1.84
	5/01/90	N	.6 JP%		.026	.100 U			.0260 JP%	.070	1.03 JP%
	5/17/90	N	.2		.020	.100 U			.0150	.040	.47
	5/30/90	N	1.3		.045	.100 U			.0470 JFP	.020 U	2.05 JP%F%
	6/12/90	N	.3		.017	.100 U			.0130	.020 U	.030
	6/25/90	N	.1 U		.013	.100 U			.0030	.010 U	.07
	7/12/90	N	.1 U		.008	.100 U			.0050	.010 U	.03 U

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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TOTAL RECOVERABLE TRACE METALS(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	ALUMINUM	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	IRON
GFSW-05	8/13/90	N	.1 U		.009	.100 U				.0040	.020 U
	10/11/90	N									.010 U
	11/12/90	N									.05
	4/30/91	N									
	5/30/91	N	.1 U		.011	.100 U					.020 U
	6/28/91	N									.010 U
	9/17/91	N	.1 U		.010	.100 U					.001 U
	5/12/92	RLS									
	5/12/92	N	.1 U		.010	.100 U					.0080 JF
	4/29/93	N	.1 U		.011	.100 U	.001 U				.020 U
	4/29/93	DUP	.1 U		.011	.100 U	.001 U				.0073
	10/06/93	N	.1 U		.008	.100 U	.001 U				.006
	4/19/94	N			.021						.0072
	5/03/94	DUP	.2		.013	.100 U	.001 U				.001 U
	5/03/94	N	.2		.010	.100 U	.001 U				.0069
	8/17/94	RLS			.012	.100 U	.001 U				.0073
	8/17/94	N	.1 UJF%		.014 JP	.100 U					.0049
	8/17/94	DUP	.4		.005 U	.100 U					.001 U
	10/11/94	N	.1 U		.009	.005 JA	.100 U	.001 U			.0048
	3/22/95	N	.1 U		.007	.012	.100 U	.001 U			.001 U
	5/31/95	N	.2 JF%A		.010	.007	.100 U	.001 U			.0060
											.0070 JA
											.001 U
											.0080 JFA
											.001 U
											.028
GFSW-06	10/04/89	N	.1 U		.005 U	.100 U					.018 JF%
	3/27/90	N	.1 U		.005 UJF	.100 U					.010 U
	4/16/90	N	.1 U		.005 U	.100 U					.006
	4/16/90	DUP	.1 U		.005 U	.100 U					.001 U
	4/23/90	N									.020 U

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

5) Metals results reported for the 6/94 sampling of MH-03 are dissolved metals.

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TOTAL RECOVERABLE TRACE METALS(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	ALUMINUM	ANTIMONY	ARSENIC	BARTUM	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	IRON	
GFSW-06	5/01/90	N	.1 UJP%	-----	005 U	100 U	-----	0001 UJP%	020 U	001 U	.16 JP%	
	5/16/90	RLS	-----	-----	005 U	100 U	-----	0001 UJP%	020 U	001 U	-----	
	5/17/90	N	.1 U	-----	.005 U	.100 U	-----	.0001 U	.020 U	.004	.16	
	5/30/90	N	.1 U	-----	.005 U	.100 U	-----	.0001 UJFP	.020 U	.004	.22 JP%F%	
	6/12/90	N	.1 U	-----	.005 U	.100 U	-----	.0001 U	.020 U	.003	.15	
	6/25/90	N	.1 U	-----	.005 U	.100 U	-----	.0001 U	.020 U	.003	.22	
	7/12/90	N	.1 U	-----	.005 U	.100 U	-----	.0001 U	.020 U	.002	.28	
	8/13/90	N	-----	-----	005 U	100 U	-----	0001 U	020 U	.003	.27	
	9/13/90	N	-----	-----	005 U	100 U	-----	0001 U	020 U	.003	-----	
	10/11/90	N	.1 U	-----	005 U	100 U	-----	0001 U	020 U	.003	-----	
	11/12/90	N	-----	-----	005 U	100 U	-----	0001 U	020 U	.003	-----	
	4/30/91	N	.1 U	-----	005 U	100 U	-----	0001	020 U	.003	.21 JP	
	5/30/91	N	-----	-----	005 U	100 U	-----	0001	020 U	.002	.39	
	6/28/91	N	-----	-----	005 U	100 U	-----	00020 JF	020 U	.010 U	.15 JF	
	9/17/91	N	.1 U	-----	005 U	100 U	-----	0001 U	020 U	.002	-----	
	5/12/92	N	.1 U	-----	006	100 U	-----	00020 JF	020 U	.010 U	-----	
	6/11/92	N	-----	-----	005 U	100 U	-----	0001 U	020 U	.002	-----	
	4/29/93	N	.1 U	-----	001 U	100 U	001 U	0001 U	001 U	.003	.33	
	6/14/93	N	-----	-----	005 U	100 U	001 U	0001 U	001 U	.003	.32	
	10/07/93	N	.1 U	-----	001	100 U	001 U	0001 U	001 U	.002 JF%	.15	
	5/03/94	N	.1 U	-----	005 U	001 JX	001 U	0001 U	001 U	.003 JFX	.88 JF	
	8/17/94	N	.5 JF%	-----	005 U	003	100 U	0001 U	001 U	.005 JF%	.60 JA	
	10/11/94	N	.1 U	-----	005 U	001 U	100 U	0001 U	001 U	.001 U	.52 JF%	
	3/22/95	N	.1 U	-----	005 U	001 U	100 U	0001 U	001 U	.001 U	.24	
	5/31/95	N	.1 UJF%A	-----	005 U	001	100 U	0001 U	001 U	.001 U	-----	
	GFSW-07	10/06/89	N	.1 U	-----	005 U	100 U	-----	0010 U	020 U	.010 U	.03 U

NOTES:

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- 3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.
- 4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.
- 5) Metals results reported for the 6/94 sampling of MH-03 are dissolved metals.

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	ALUMINUM	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	IRON
GFSW-07	3/27/90	N	.1 U		.005 UJF	.100 U		.0010 U	.020 U	.010 U	.03 U
	4/16/90	N	.1 U		.005 U	.100 U		.0010 U	.020 U	.010 U	.13
	5/01/90	N	.1 UJP%		.005 U	.100 U		.0001 UJP%	.020 U	.001 U	.07 JP%
	5/16/90	N	.1 U		.005 U	.100 U		.0001 U	.020 U	.001 U	.11
	5/31/90	N	.1 U		.005 U	.100 U		.0001 UJFP	.020 U	.001 U	.12 JP%F%
	6/12/90	N	.1 U		.005 U	.100 U		.0001 U	.020 U	.001 U	.07
	6/12/90	DUP	.1 U		.005 U	.100 U		.0001 U	.020 U	.002 U	.07
	6/25/90	N	.1 U		.005 U	.100 U		.0001 U	.020 U	.001 U	.11
	7/12/90	N	.1 U		.005 U	.100 U		.0001 U	.020 U	.001 U	.08
	8/13/90	N									
	10/11/90	N	.1 U		.005 U	.100 U		.0010 U	.020 U	.010 U	.03 U
	11/12/90	N									
	12/10/90	N									
	4/30/91	N									
	5/30/91	N	.1 U		.005 U	.100 U		.0001 U	.020 U	.001 U	.15 JP
	6/28/91	N									
	9/16/91	N	.1 U		.005 U	.100 U		.0001 U	.020 U	.001 U	.04
	4/29/93	N	.1 U		.005 U	.100 U		.0001 U	.001 U	.001 U	.03 U
	10/07/93	N	.1		.005 U	.001 U	.100 U	.001 U	.0001 U	.001 U	.14
	10/07/93	DUP	.1 U		.005 U	.001 U	.100 U	.001 U	.0001 U	.001 U	.14
	4/19/94	N									
	5/03/94	N	.1 U		.005 U	.001 U	.100 U	.001 U	.0001 UJF	.001 U	.001 UJF%
	8/17/94	RLS									
	8/17/94	N	.6 JF%		.005 U	.001 U	.100 U		.0003 JP	.001 U	.001 JFX
	10/11/94	N	.1 U		.005 U	.001 U	.100 U	.001 U	.0001 U	.001 U	.002 JF%
	5/31/95	N	.2 JF%A		.005 U	.001 U	.100 U	.001 U	.0001 UJFA	.001 U	.001 U

NOTES:

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- 2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.
- 3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.
- 4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.
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STATION	SAMPLE DATE	SAMPLE TYPE(2)	ALUMINUM	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	IRON
GFSW-08	10/06/89	N	.1 U		.005 U	.100 U			.0010 U	.020 U	.010 U
	3/26/90	N	.1 U		.005 UJF	.100 U			.0010 U	.020 U	.010 U
	4/16/90	N	.1		.005 U	.100 U			.0010	.020 U	.010 U
	5/01/90	N	.1 UJP%		.005 U	.100 U			.0001 UJP%	.020 U	.001 U
	5/16/90	N	.1 U		.005 U	.100 U			.0001 U	.020 U	.004
	5/31/90	N	.1		.005 U	.100 U			.0001 UJFP	.020 U	.001
	6/12/90	N	.1 U		.005 U	.100 U			.0001 U	.020 U	.003
	6/25/90	N	.1 U		.005 U	.100 U			.0001 U	.020 U	.003
	7/12/90	N	.1 U		.005 U	.100 U			.0001 U	.020 U	.10
	8/13/90	N			.005 U	.100 U			.0001 U	.020 U	.05
	9/13/90	N			.005 U	.100 U			.0001 U	.020 U	.03 U
	10/11/90	N	.1 U								
	11/12/90	N									
	12/10/90	N									
	4/30/91	N									
	5/30/91	N	.1 U		.005 U	.100 U			.0001 U	.020 U	.001 U
	6/28/91	N									
	9/17/91	N	.1 U		.005 U	.100 U			.0001 U	.020 U	.001 U
	4/29/93	N	.1 U		.005 U	.100 U	.001 U		.0001 U	.001 U	.002
	10/07/93	N	.1 U		.005 U	.100 U	.001 U		.0001 U	.001 U	.001 U
	4/19/94	N			.005				.0001 U		.006
	5/03/94	N	.1 U		.005 U	.002 JX	.100 U	.001 U	.0001 UJF	.001 U	.001 UJF%
	8/17/94	RLS			.001				.0001 U		.001
	8/17/94	N	.9 JF%		.005 U	.001 U	.100 U		.0001 U	.001 U	.002 JFX
	10/11/94	N	.1 U		.005 U	.001 U	.100 U	.001 U	.0002	.001 U	.005 JF%
	5/31/95	N	.1 JF%A		.005 U	.001 U	.100 U	.001 U	.0001 UJFA	.001 U	.001 U

NOTES:

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- Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.
- Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.
- Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.
- Metal results reported for the 6/94 sampling of MH-03 are dissolved metals.

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	ALUMINUM	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	IRON
GFSW-09	10/06/89	N	.1 U		.005 U	.100 U			.0030	.020 U	.010 U
	3/26/90	N	.1 U		.005 UJF	.100 U			.0001 U	.020 U	.007
	4/16/90	N	.1 U		.005 U	.100 U			.0010 U	.020 U	.010
	5/01/90	N	.1 UJP%		.005 U	.100 U			.0010 UJP%	.020 U	.010 U
	5/16/90	N	.1 U		.005 U	.100 U			.0010 U	.020 U	.010
	5/31/90	N	.1 U		.005	.100 U			.0020 JFP	.020 U	.010
	6/12/90	N	.2		.005 U	.100 U			.0010 U	.020 U	.030
	6/25/90	N	.1 U		.005 U	.100 U			.0010 U	.020 U	.010
	7/13/90	N								.020 U	.010 U
	8/13/90	N								.020 U	.010 U
	10/11/90	N	.1 U		.005 U	.100 U			.0010 U	.020 U	.010 U
	11/12/90	N								.020 U	.010 U
	12/10/90	N								.020 U	.010 U
	4/30/91	N								.020 U	.010 U
	5/30/91	N	.1 U		.005 U	.100 U			.0010 U	.020 U	.010
	6/28/91	N								.020 U	.010
	9/17/91	N	.1 U		.005 U	.100 U			.0001	.020 U	.006
	5/12/92	N	.1 U		.005 U	.100 U			.0020 JF	.020 U	.010 U
	12/07/92	N			.005 U				.0001 U	.020 U	.004
	1/20/93									.020 U	.010 U
	2/03/93									.020 U	.010 U
	2/18/93	N			.005 U				.0001 U	.020 U	.010
	3/04/93	N			.005 U				.0001 U	.020 U	.010
	10/06/93	N	.1 U		.005 U	.100 U			.0001 U	.020 U	.010
	4/19/94	N			.003				.0003	.020 U	.010
	5/03/94	N	.1 U		.005 U	.003 JX			.0001 UJF	.020 U	.004 JF%
	8/17/94	RLS			.003				.0001 U	.020 U	.007

NOTES:

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- Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.
- Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.
- Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.
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STATION	SAMPLE DATE	SAMPLE TYPE(2)	ALUMINUM	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	IRON
GFSW-09	8/17/94	N	.7 JF%	.005 U	.004	.100 U		.0001 U	.001 U	.007 JFX	.12 JF
	10/11/94	N	.1 U	.005 U	.001 U	.100 U	.001 U	.0001 U	.001 U	.013 JFX%	.40 JA
	5/31/95	N	.1 JFXA	.005 U	.002	.100 U	.001 U	.0001 UJFA	.001 U	.027	.15
GFSW-10	9/20/89	N	.2	.009	.100 U			.0050	.020 U	.360	12.44
	9/29/89	N	.6	.012	.100 U			.0120	.020 U	1.830	24.30
	3/26/90	N	.2	.023 JF	.010 U			.0040 JX	.020 U	.340	15.20
	4/16/90	N	.2	.027	.100 U			.0050	.020 U	.310	13.80
	4/30/90	N	.1 UJP%	.019	.100 U			.0020 JP%	.020 U	.430	12.00 JP%
	5/16/90	N	3.2	.028	.100 U			.0060	.020 U	.870	23.70
	5/29/90	N	.3	.030	.100 U			.0070 JFP	.020 U	.690	17.50 JP%F%
	6/11/90	N	.1 U	.018	.100 U			.0060	.020 U	.580	13.90
	6/26/90	N	.1 U	.016	.100 U			.0050	.020 U	.580	13.98
	7/12/90	N	.1 U	.013	.100 U			.0020	.020 U	.570	13.90
	10/10/90	N	.1 U	.014	.100 U			.0070	.020 U	.420	13.61
	4/30/91	N									
	6/28/91	N									
GFSW-11	9/21/89	N	.1 U	.005 U	.100 U			.0010 U	.020 U	.010 U	.03 U
	10/05/89	N									
	3/26/90	N	.1 U	.005 UJF	.100 U			.0010 U	.020 U	.010 U	.03 U
	4/09/90	N	.1 U	.005 U	.100 U			.0010 U	.020 U	.010 U	.05
	4/30/90	N	.1 UJP%	.005 U	.100 U			.0001 UJP%	.020 U	.001 U	.06 JP%
	5/16/90	N	.1 U	.005 U	.100 U			.0001 U	.020 U	.001 U	.06
	5/16/90	DUP	.1 U	.005 U	.100 U			.0001 U	.020 U	.002	.04
	5/29/90	N	.1	.005 U	.100 U			.0001 UJFP	.020 U	.002	.23 JP%F%
	6/11/90	RLS	.2	.005 U	.100 U			.0050 U	.020 U	.020 U	.11

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BJS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

5) Metals results reported for the 6/94 sampling of MH-03 are dissolved metals.

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TOTAL RECOVERABLE TRACE METALS(1)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	ALUMINUM	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	IRON
GFSW-11	6/11/90	N	.2		.005 U	.100 U			.0001 U	.020 U	.001
	6/26/90	N	.1 U		.005 U	.100 U			.0001 U	.020 U	.001 U
	7/12/90	N	.1 U		.005 U	.100 U			.0001 U	.020 U	.001 U
	8/13/90	N									.04
	10/10/90	N	.1 U		.005 U	.100 U			.0001 U	.020 U	.001 U
	11/12/90	N									.05
	12/10/90	N									
	4/30/91										
	6/28/91	N									
	12/07/92	N									
	1/20/93	N									
	2/03/93	N									
	2/18/93	N									
	3/04/93	N									
	3/05/93	RLS									
	10/12/94	N	.1 U		.005 U	.001 U	.100 U	.001 U	.0001 U	.001 U	.003 JF%
	5/31/95	N	.1 JF%A		.005 U	.001	.100 U	.001 U	.0001 UJFFA	.001 U	.001
											.20
	4/18/90	N	.1 U		.005	.100 U			.0010 U	.020 U	.010 U
	5/01/90	N	.1 UJP%		.005 U	.100 U			.0010 UJP%	.020 U	.010 U
	5/18/90	N	.1 U		.005 U	.100 U			.0010 U	.020 U	.010 U
	5/31/90	N	.3		.008	.100 U			.0030 JFP	.020 U	.010 U
	6/12/90	N	.2		.005 U	.100 U			.0010 U	.020 U	.010 U
	6/26/90	N	.1 U		.005 U	.100 U			.0010 U	.020 U	.010 U
	7/13/90	N									.19
	8/13/90	N									
	9/13/90	N									

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

5) Metals results reported for the 6/94 sampling of MH-03 are dissolved metals.

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3/19/96 TOTAL RECOVERABLE TRACE METALS(1)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	ALUMINUM	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	IRON
GFSW-12	10/11/90	N	.1 U		.005 U	.100 U		.0010 U	.020 U	.010 U	.10
	12/10/90	N	.1 U		.005 U	.100 U		.0010 U	.020 U	.010 U	.07
	3/18/91	N	.1 U		.005 U	.100 U		.0010	.020 U	.010 U	.04
	4/30/91	N	.1 U		.005 U	.100 U					
	5/30/91	N									
	6/28/91	N									
	9/17/91	N	.1 U		.005 U	.100 U		.0010	.020 U	.010 U	.07
	5/12/92	N	.1 U		.005 U	.100 U		.0010	.020 U	.010 U	.07
	4/29/93	N	.1 U		.005 U	.002	.100	.001 U	.0009	.001 U	.002
	10/06/93	N	.1 U		.005 U	.003	.100 U	.001 U	.0009	.001 U	.002
	5/03/94	N	.1 U		.005 U	.003 JX	.100 U	.001 U	.0010 JFX	.001 U	.002 JF%
	8/16/94	N	.3 JF%		.005 U	.004	.100 U		.0005	.001 U	.003 JFX
	10/11/94	N	.1 U		.005 U	.002 JA	.100 U	.001 U	.0008	.001 U	.003 JF%
	3/22/95	N	.1 U		.005 U	.002	.100 U	.001 U	.0006 JA	.001 U	.001 U
	6/01/95	N	.3 JF%A		.005 U	.002	.100 U	.001 U	.0020 JFA	.001 U	.010
GFSW-13	4/29/93	N	.1 U		.005 U	.001	.100 U	.001 U	.0001 U	.001 U	.002
	10/07/93	N	.1 U		.005 U	.002	.100 U	.001 U	.0001 U	.001 U	.002
	4/19/94	N				.007			.0001		.050
	8/17/94	N				.002			.0004		
	10/11/94	N	.1 U		.005 U	.001 U	.100 U	.001 U	.0001 U	.001 U	.004 JF%
	5/31/95	N	.2 JF%A		.005 U	.002	.100 U	.001 U	.0001 UJFA	.001 U	.008
GFSW-14	4/29/93	N	.1 U		.005 U	.002	.100 U	.001 U	.0006	.001 U	.002
	10/06/93	N	.1 U		.005 U	.003	.100 U	.001 U	.0007	.001 U	.002
	5/03/94	N	.2		.005 U	.004 JX	.100 U	.001	.0005 JFX	.001 U	.001 JF%

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

5) Metals results reported for the 6/94 sampling of MH-03 are dissolved metals.

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TOTAL RECOVERABLE TRACE METALS(1)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	ALUMINUM	ANTIMONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	IRON
GFSW-15	8/16/94	N .9 JF%	.005 U	.004	.100 U	.0001 U	.001 U	.013 JF	.28 JF	
	10/11/94	N .1 U	.005 U	.001 U	.100 U	.0002	.001 U	.002 JF%	2.60 JA	
	3/22/95	N .1 U	.005 U	.002	.100 U	.0002 JA	.001 U	.001 U	.23 JF%	
	3/22/95	D .1 U	.005 U	.002	.100 U	.0002	.001 U	.001 U	1.11	
	6/01/95	N .2 JF%A	.005 U	.001 U	.100 U	.0001 UJFA	.001 U	.005	.30	
GFSW-16	4/28/94	N	.002	.002 JX	.100 U	.0001 U	.0001 U	.001 U	.001 UJF%	.03 U
	5/03/94	N .1 U	.005 U	.002 JX	.100 U	.0001 U	.0001 UJF	.001 U	.001 UJF%	
	6/04/94	N								
	8/17/94	RLS								
	8/17/94	N .1 JF%	.005 U	.001	.100 U	.0001 U	.001 U	.001 U	.001 JFX	.05 JF
	10/11/94	N .1 U	.005 U	.001 U	.100 U	.0001 U	.001 U	.004 JF%	1.32 JA	
	3/22/95	N .1 U	.005 U	.001 U	.100 U	.0001 UJA	.001 U	.001 U	.08 JF%	
	6/01/95	N .4 JF%A	.005 U	.001 U	.100 U	.0001 UJFA	.001 U	.002	.22	
GFSW-17	6/04/94	N .2	.005 U	.002	.100 U	.0001 U	.0007	.002	.001 U	.06
	8/17/94									
	10/11/94									
	6/01/95	N 1.2 JF%A	.005 U	.002	.100 U	.0001 U	.0001 UJFA	.001 U	.004	1.12
GFSW-18	6/01/95	N 1.0 JF%A	.005 U	.004	.100 U	.0004 JFA	.001 U	.003	.74	
GFSW-19	6/01/95	N 1.0 JF%A	.005 U	.007	.100 U	.0006 JFA	.001 U	.004	.60	
GFSW-20	6/01/95	N .7 JF%A	.005 U	.004	.100 U	.0001 UJFA	.001 U	.007	1.03	
	6/01/95	D .9	.005 U	.006	.100 U	.0007	.001 U	.014	.119	

NOTES:

- 1) All values are given in mg/L unless otherwise noted.
- 2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.
- 3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimate; R - value rejected.
- 4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.
- 5) Metals results reported for the 6/94 sampling of MH-03 are dissolved metals.

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	ALUMINUM	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	IRON
LQG	5/24/90	N	.1 U		.005 U	.100 U		.0010 U	.020 U	.010 U	.03 U
	5/31/90	N									
	6/11/90	N	.3		.005 U	.100 U		.0010 U	.020 U	.010 U	.23
MH-01	5/25/95	N	.2		.005 U	.002	.100	.001	.0022	.001 U	.014
	6/05/94	N	.1 U		.005 U	.009	.100 U	.001 U	.0006	.001 U	.20
MH-03	5/25/95	N	.3		.005 U	.007	.100 U	.009	.0009	.001 U	.077
SDC	7/26/89	N									1.50
SG-01	5/29/90	N									
	5/31/90	N									
	6/11/90	N									
	6/25/90										
	10/10/90										
	4/30/91										
	6/28/91										
SG-02	4/16/90	N									
	5/01/90	N									
	5/16/90	N									
	5/31/90	N									
	6/12/90	N									
	6/25/90	N									
	7/13/90	N									
	8/13/90	N									

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

5) Metals results reported for the 6/94 sampling of MH-03 are dissolved metals.

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TOTAL RECOVERABLE TRACE METALS(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	ALUMINUM	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	IRON
SG-02	9/13/90	N									
	10/11/90	N									
	11/12/90	N									
	12/10/90	N									
	4/30/91	N									
	6/28/91	N									
SHC	7/26/89	N									
	7/26/89	DUP									
SR-A	4/23/90	N									
SR-B	4/23/90	N									
SR-C	4/23/90	N									
SR-D	4/23/90	N									
SR-E	4/23/90	N									
SR-F	4/23/90	N									
SR-G	4/23/90	N									
UN ADIT	6/01/95	N	.1 UJF%A	.021	.001 U	.100 U	.001 U	.0420 JFA	.001 U	.032	.05
	6/21/95	N			.018			.0480		.080	.76

NOTES:

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- 2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.
- 3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.
- 4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.
- 5) Metals results reported for the 6/94 sampling of MH-03 are dissolved metals.

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TOTAL RECOVERABLE TRACE METALS(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	ALUMINUM	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	IRON
UQG	5/24/90	N									
WSW-07	8/17/94	N	.1 U	.005 U	.001 U	.100 U	.001 U	.0001 U	.0001 U	.001 UJF	.002 JF%
	10/12/94	N			.001 U						
BLANK	3/28/90	FB	.1 U		.005 U	.100 U		.0010	.020 U	.010 U	.03 U
	6/27/90	FB	.1 U		.005 U	.100 U		.0010	.020 U	.010 U	.03 U
	12/10/90	FB	.1 U		.005 U	.100 U		.0010	.020 U	.010 U	.03 U
	3/18/91	FB	.1 U		.005 U	.100 U		.0010	.020 U	.010 U	.03 U
	5/12/92	FB	.1 U		.005 U	.100 U		.0010	.020 U	.010 U	.03 U
	5/03/94	FB	.1 U	.005 U	.002	.100 U	.001 U	.0003	.001 U	.001 U	.03 U
	8/17/94	FB	.1 U	.005 U	.001 U	.100 U	.0001 U	.0001 U	.0002	.002	.03 U
BLIND FIELD	6/15/90	BFS	.1		.110	.100 U		.1730	.260	.120	.16
	10/12/94	BFS	.3	.025	.069	.200	.020	.0150	.097	.150	.35
	3/22/95	BFS	.3	.040	.076	1.600	.045	.0425	.090	.480	.10
	5/31/95	BFS	.8	.100	.070	.930	.036	.0280	.060	.213	.12

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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TOTAL RECOVERABLE TRACE METALS(1)
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STATION	SAMPLE DATE	SAMPLE TYPE(2)	LEAD	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC
BARREL	5/25/95	N	.002 U	.080	.0002 U	.005 U	.005 U	.001 U	.0007	.002 U	.180
ELKHIC	5/31/90	N	.030	.040 JP	.0010 U	.005 U	.030 U	.005 U	.0050 U		.050 JP
GBG	7/26/89	N									
GFSW-01	9/21/89	N	.010 U	.020 U	.0010 U	.005 U	.0010 U	.005 U	.005 U	.0050 U	.020
	10/05/89	N									
	3/27/90	N	.010 UJF	.020 U	.0010 U	.005 U	.0010 U	.005 U	.005 U	.0050 U	.010 JX
	4/09/90	N	.010 U	.020 U	.0010 U	.005 U	.0010 U	.005 U	.005 U	.0050 U	.030
	4/30/90	N	.002 U	.020 U	.0001 UJP	.005 U	.0001 UJP	.030 U	.005 U	.0005 UJP	.010
	5/16/90	N	.004	.020	.0001 U	.005 U	.0001 U	.030 U	.005 U	.0050 U	
	5/29/90	N	.003	.020 UJP	.0001 U	.005 U	.0001 U	.030 U	.005 U	.0005 U	.010 JP
	5/29/90	DUP	.003	.020 UJP	.0001 U	.005 U	.0001 U	.030 U	.005 U	.0005 U	.020
	6/11/90	N	.004	.030	.0001 U	.005 U	.0001 U	.030 U	.005 U	.0005 U	.010
	6/26/90	RLS									
	6/26/90	N	.002 U	.020 U	.0001 U	.005 U	.0001 U	.030 U	.005 U	.0005 U	.010 U
	7/12/90	N	.002 U	.020 U	.0001 U	.006	.0001 U	.030 U	.005 U	.0005 U	.010
	8/13/90	N									
	10/10/90	RLS									
	10/10/90	N	.002 U	.020 U	.0001 U	.005 U	.0001 U	.030 U	.005 U	.0005 U	.010 U
	4/30/91	N									
	5/30/91	RLS	.020 U	.020 U	.0001 U	.050 U	.0001 U	.020 U	.005 U	.0007	.020 U
	5/30/91	N	.002 U	.020 U	.0001 U	.005 U	.0001 U	.030 U	.005 U	.0005 U	.010
	6/28/91	N									
	9/16/91	N	.002 U	.020 U	.0001 U	.005 U	.0001 U	.030 U	.005 U	.0005 U	.010
	12/07/92	N	.002 U	.005 U							.040

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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TOTAL RECOVERABLE TRACE METALS(1)
(CONT.)

STATION	SAMPLE DATE	SAMPLE	LEAD	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC
		TYPE(2)		-----	-----	-----	-----	-----	-----	-----	-----
GFSW-01	1/20/93	N	.002 U	.005 U							.020
	2/03/93	N									
	2/18/93	N	.002 U	.010 U							
	3/04/93	N	.002 U	.010 U							
	3/04/93	DUP	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.010 U
	4/29/93	N	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.009
	10/06/93	N	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.006
	5/03/94	N	.002 UJF%	.010 UJF	.0002 U	.005 U	.005 U	.001 U	.0005 UJF%	.002 U	.005 JF%X
	8/17/94	N	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.015 JX
	10/11/94	N	.004	.020	.0002 UJA	.005 U	.005 U	.001 U	.0005 UJA	.002 URA	.015
	3/22/95	N	.002 U	.010 U	.0002 U	.013	.006	.001 U	.0005 U	.002 U	.022 JF
	6/01/95	N	.002 JFA	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.005 U
GFSW-02	9/21/89	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U	.0020	
	10/05/89	N									
	3/27/90	N	.034 JF	.420	.0002 U	.005 U					
	3/27/90	DUP	.050	.420	.0010 U	.005 U					
	4/09/90	N	.010 U	.070	.0010 U	.005 U					
	4/30/90	N	.002 U	.020	.0001 UJP	.005 U	.030 U	.005 U	.0005 UJP		
	4/30/90	DUP	.002 U	.020	.0001 U	.005 U	.030 U	.005 U	.0005 U		
	5/16/90	N	.006	.080	.0001 U	.005 U	.030 U	.005 U	.0005 U		
	5/29/90	RLS	.020 U	.040	.0005 U	.050 U	.020 U	.008	.0200 U		
	5/29/90	N	.003	.090 JP	.0001 U	.005 U	.030 U	.005 U	.0005 U		
	6/11/90	N	.003	.050	.0001 U	.005 U	.030 U	.005 U	.0005 U		
	6/25/90	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U		
	7/09/90	N	.002 U	.020 U	.0001 U	.009	.030 U	.005 U	.0005 U		
	7/13/90	N									

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2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

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TOTAL RECOVERABLE TRACE METALS(1)
(CONT.)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	LEAD	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC
GFSW-02	10/11/90	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U	.0005 U	.010
	4/30/91	N	.007	.080	.0001 U	.005 U	.030 U	.005 U	.0005 U	.0005 U	.030
	5/30/91	N									
	6/28/91	N									
	9/16/91	RLS	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U	.0005 U	.010
	9/16/91	N	.002 U	.020	.0001 U	.005 U	.030 U	.005 U	.0005 U	.0005 U	.010 U
	5/12/92	N	.002 U	.020	.0001 U	.005 U	.030 U	.005 U	.0005 U	.0005 U	.010 U
	5/12/92	DUP	.002 U	.020 U	.0001 U	.005 U	.005 U	.001 U	.0005 U	.0005 U	.009
	4/29/93	N	.004	.010	.0002 U	.005 U	.005 U	.001 U	.0005 U	.0002 U	.010
	10/06/93	N	.002 U	.010	.0002 U	.005 U	.005 U	.001 U	.0005 U	.0002 U	.010
	4/19/94	N	.020	.0002 U	.0002 U	.005 U	.005 U	.001 U	.0005 UJF%	.0002 U	.008 JF%X
	4/19/94	DUP	.019								
	5/03/94	N	.002 UJF%	.020 JF	.0002 U	.005 U	.005 U	.001 U	.0005 UJF%	.0002 U	.008 JF%X
	8/17/94	RLS	.002 U	.0002 U	.0002 U	.005 U	.005 U	.002	.0005 U	.0002 U	.022 JX
	8/17/94	N	.002 U	.030	.0002 UJA	.005 U	.005 U	.001 U	.0005 UJA	.0002 URA	.015
	10/11/94	N	.005	.060	.0002 UJA	.005 U	.005 U	.001 U	.0005 U	.0002 U	.020
	10/11/94	DUP	.007	.060	.0002 UJA	.005 U	.005 U	.001 U	.0005 U	.0002 U	.017 JF
	3/22/95	N	.002 U	.020	.0002 U	.013	.005 U	.001 U	.0005 U	.0002 U	.005 U
	5/31/95	N	.002 JFA	.010 JA	.0002 U	.007	.005 U	.001 U	.0005 U	.0005 U	
	9/27/89	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U	.0050 U	.010 U
	3/27/90	N	.010 UJF	.020 U	.0010 U	.005 U	.005 U	.005 U	.0050 U	.0050 U	.010 JX
	4/16/90	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U	.0050 U	.020
	4/30/90	N	.002 U	.020 U	.0001 UJP	.005 U	.030 U	.005 U	.0005 UJP	.0005 UJP	.010 U
	5/16/90	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U	.0005 U	.010 U
	5/29/90	N	.002 U	.020 UJP	.0001 U	.005 U	.030 U	.005 U	.0005 U	.0005 U	.010 JP
	6/11/90	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U	.0005 U	.010 U

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

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5) Metals results reported for the 6/94 sampling of MH-03 are dissolved metals.

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3/19/96 TOTAL RECOVERABLE TRACE METALS(1)
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STATION	SAMPLE DATE	SAMPLE	TYPE (2)	LEAD	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC
GFSW-03	6/25/90	N	.003	.020	.001 U	.005 U	.030 U	.005 U	.005 U	.0005 U	.0005 U	.010 JX
	7/09/90	N	.002 U	.020 U	.001 U	.010	.030 U	.005 U	.005 U	.0005 U	.0005 U	.010 U
	10/10/90	N	.002 U	.020 U	.001 U	.005 U	.030 U	.005 U	.005 U	.0005 U	.0005 U	.010 U
	4/30/91	N										
	6/28/91	N										
GFSW-04	9/22/89	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.005 U	.0050 U	.0050 U	.020
	5/29/90	N	.010 U	.020 UJP	.0010 U	.005 U	.030 U	.005 U	.005 U	.0050 U	.0050 U	.010 UJP
	5/31/90	N										
	6/11/90	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.005 U	.0050 U	.0050 U	.010 JX
	6/26/90	N	.010	.020 U	.0010 U	.005 U	.030 U	.005 U	.005 U	.0050 U	.0050 U	.010 U
	6/26/90	DUP	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.005 U	.0050 U	.0050 U	.010 U
	7/12/90	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.005 U	.0050 U	.0050 U	
	10/10/90											
	4/30/91											
GFSW-05	10/04/89	N	.200	.100	.0010 U	.005 U	.030 U	.005 U	.005 U	.0050 U	.0133	.860
	3/27/90	N	.560 JF	.210	.0002 U	.005 U	.030 U	.005 U	.005 U	.0050 U	.0050 U	.700
	4/09/90	N	.140	.060	.0010 U	.005 U	.030 U	.005 U	.005 U	.0050 U	.0050 U	
	4/23/90	N										
	5/01/90	RLS	.490	.360	.0009	.050 U	.050	.005 U	.005 U	.0070	.0005 UJP	.0005 UJP
	5/01/90	N	.580	.390	.0001 UJP	.005 U	.030 U	.005 U	.005 U	.005 U	.0005 U	.900
	5/17/90	N	.270	.180	.0001 U	.005 U	.030 U	.005 U	.005 U	.0177	.0005 U	4.110 JP
	5/30/90	N	1.370	.780 JP	.0001	.005 U	.030 U	.005 U	.005 U	.0029	.0029	.800
	6/12/90	N	.270	.130	.0001 U	.005 U	.030 U	.005 U	.005 U	.0005 U	.0005 U	.150
	6/25/90	N	.040	.020 U	.0001 U	.005 U	.030 U	.005 U	.005 U	.0005 U	.0005 U	.090
	7/12/90	N	.010 U	.020 U	.0001 U	.008	.030 U	.008	.008			

- NOTES: 1) All values are given in mg/L unless otherwise noted.
 2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.
 3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.
 4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable range; P - reference lab split results outside acceptable limits; H - holding time exceeded.
 outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; NH-03 are dissolved metals.

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TOTAL RECOVERABLE TRACE METALS(1)
(CONT.)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	LEAD	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC
GFSW-05	8/13/90	N	.030	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U	.0005 U	.230
	10/11/90	N									
	11/12/90	N									
	4/30/91	N									
	5/30/91	N	.050	.040	.0001 U	.005 U	.030 U	.005 U	.0005 U	.0005 U	.450
	6/28/91	N									
	9/17/91	N	.040	.030	.0001 U	.005 U	.030 U	.005 U	.0005 U	.0005 U	.370
	5/12/92	RLS									
	5/12/92	N	.020	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U	.0005 U	.270
	4/29/93	N	.012	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.0005 U	.280
	4/29/93	DUP	.012	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.0005 U	.280
	10/06/93	N	.040	.010	.0002 U	.005 U	.005 U	.001 U	.0005 U	.0005 U	.199
	4/19/94	N	.190		.0002 U						
	5/03/94	DUP	.280	.130	.0002 U	.005 U	.005 U	.001 U	.0041	.002 U	.790
	5/03/94	N	.200	.070 JF%	.0002 U	.005 U	.005 U	.001 U	.0025 JF%	.002 U	.540 JF%
	8/17/94	RLS	.066		.0002 U						
	8/17/94	N	.067	.050	.0002 U	.005 U	.005 U	.002	.0009	.002 U	.336
	8/17/94	DUP	.069	.050	.0002 U	.005 U	.005 U	.001 U	.0008	.002 U	.305
	10/11/94	N	.014	.020	.0002 UJA	.005 U	.005 U	.001 U	.0005 UJA	.002 URA	.332
	3/22/95	N	.015	.010	.0002 U	.017	.005 U	.001 U	.0005 U	.002 U	.408 JF
	5/31/95	N	.300 JFA	.100 JA	.0052	.007	.005 U	.001 U	.0005 U	.002 U	.890
	10/04/89	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U	.0050 U	.010
	3/27/90	N	.002 UJF	.020 U	.0002 U	.005 U			.0005 U	.0005 U	.010 JX
	4/16/90	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0200	.0200	.020
	4/16/90	DUP	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0170	.0170	
	4/23/90	N									

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

5) Metals results reported for the 6/94 sampling of MH-03 are dissolved metals.

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TOTAL RECOVERABLE TRACE METALS(1)
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STATION	SAMPLE DATE	SAMPLE TYPE(2)	LEAD	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC
GFSW-06	5/01/90	N	.002 U	.020 U	.0001 UJP	.005 U	.030 U	.005 U	.0005 UJP	-----	.010 U
	5/16/90	RLS	-----	-----	-----	-----	-----	-----	-----	-----	-----
	5/17/90	N	.020 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0005 U	.010 U	.010 U
	5/30/90	N	.002 U	.020 UJP	.0001 U	.005 U	.030 U	.005 U	.0005 U	.010 JP	.010 JP
	6/12/90	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U	.170	.170
	6/25/90	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U	.030 JX	.030 JX
	7/12/90	N	.002 U	.020 U	.0001 U	.008	.030 U	.005 U	.0005 U	.050	.050
	8/13/90	N	-----	-----	-----	-----	-----	-----	-----	-----	-----
	9/13/90	N	-----	-----	-----	-----	-----	-----	-----	-----	-----
	10/11/90	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U	.010 U	.010 U
	11/12/90	N	-----	-----	-----	-----	-----	-----	-----	-----	-----
	4/30/91	N	.002 U	.020 U	0.0000 U	.005 U	.030 U	.005 U	.0005 U	.010	.010
	5/30/91	N	-----	-----	-----	-----	-----	-----	-----	-----	-----
	6/28/91	N	-----	-----	-----	-----	-----	-----	-----	-----	-----
	9/17/91	N	.002 U	.020	.0001 U	.005 U	.030 U	.005 U	.0005 U	.010 U	.010 U
	5/12/92	N	.002 U	.020	.0001 U	.005 U	.030 U	.005 U	.0005 U	.010 U	.010 U
	6/11/92	N	-----	-----	-----	-----	-----	-----	-----	-----	-----
	4/29/93	N	.005 U	.020	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.005 U
	6/14/93	N	-----	-----	-----	-----	-----	-----	-----	-----	-----
	10/07/93	N	.002 U	.020	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.009
	5/03/94	N	.002 UJF%	.010 UJF	.0002 U	.005 U	.005 U	.001 U	.0005 UJF%	.002 U	.006 JF%
	8/17/94	N	.002 U	.030	.0002 U	.005 U	.005 U	.002	.0005 U	.002 U	.014 JX
	10/11/94	N	.002 U	.040	.0002 UJA	.005 U	.005 U	.001 U	.0005 UJA	.002 URA	.006
	3/22/95	N	.002 U	.020	.0002 U	.008	.005 U	.001 U	.0013 JA	.002 U	.027 JF
	5/31/95	N	.002 JFA	.010 JA	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.016
GFSW-07	10/06/89	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U	.010 U	.010 U

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

5) Metals results reported for the 6/94 sampling of MH-03 are dissolved metals.

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	LEAD	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC
GFSW-07	3/27/90	N	.010 UJF	.020 U	.0010 U	.005 U	.005 U	.005 U	.0050 U	.010 U	---
	4/16/90	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U	.020	---
	5/01/90	N	.002 U	.020 U	.0001 UJP	.005 U	.030 U	.005 U	.0005 UJP	.010	---
	5/16/90	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U	.010 U	---
	5/31/90	N	.002 U	.020 UJP	.0001 U	.005 U	.030 U	.005 U	.0005 U	.010 U	---
	6/12/90	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U	.010 JP	---
	6/12/90	DUP	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U	.010 U	---
	6/25/90	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U	.010 U	---
	7/12/90	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U	.010 U	---
	8/13/90	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0005 U	.040	---
	10/11/90	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0005 U	.010 U	---
	11/12/90	N									---
	12/10/90	N									---
	4/30/91	N									---
	5/30/91	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U	.010 U	---
	6/28/91	N									---
	9/16/91	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U	.010 U	---
	4/29/93	N	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.020	---
	10/07/93	N	.002 U	.010	.0002 U	.005 U	.005 U	.001 U	.0005 U	.013	---
	10/07/93	DUP	.002 U	.010	.0002 U	.005 U	.005 U	.001 U	.0005 U	.010	---
	4/19/94	N	.002 U	.002 U	.0002 U	.005 U	.005 U	.001 U	.0005 U		---
	5/03/94	N	.002 UJF%	.010 UJF	.0002 U	.005 U	.005 U	.001 U	.0005 UJF%	.002 U	.011 JFXX
	8/17/94	RLS	.002 U		.0002 U						---
	8/17/94	N	.002 U	.020	.0002 U	.005 U	.005 U	.001 U	.0005 U	.021 JX	---
	10/11/94	N	.002 U	.020	.0002 UJA	.005 U	.005 U	.001 U	.0005 UJA	.006	---
	5/31/95	N	.002 JFA	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.005 U	---

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

5) Metals results reported for the 6/94 sampling of MH-03 are dissolved metals.

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TOTAL RECOVERABLE TRACE METALS(1)
(CONT.)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	LEAD	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC
GFSW-08	10/06/89	N	.010 U	.020 U	.0000 U	.005 U	.030 U	.005 U	.005 U	.0050 U	.010 U
	3/26/90	N	.010 UJF	.020 U	.0010 U	.005 U	.030 U	.005 U	.005 U	.0050 U	.010 U
	4/16/90	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.005 U	.0050 U	.020
	5/01/90	N	.002 U	.020 U	.0001 UJP	.005 U	.030 U	.005 U	.005 U	.0005 UJP	.010
	5/16/90	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.005 U	.0005 U	.010 U
	5/31/90	N	.002 U	.020 UJP	.0001 U	.005 U	.030 U	.005 U	.005 U	.0005 U	.010 JP
	6/12/90	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.005 U	.0005 U	.010 U
	6/25/90	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.005 U	.0005 U	.030 JX
	7/12/90	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.005 U	.0005 U	.010 U
	8/13/90	N									
	9/13/90	N									
	10/11/90	N	.002 U	.020 U	.0001 U	.005 U					
	11/12/90	N									
	12/10/90	N									
	4/30/91	N									
	5/30/91	N	.002 U	.020 U	.0000 U	.005 U	.030 U	.005 U	.0005 U	.0005 U	.010 U
	6/28/91	N									
	9/17/91	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U	.0005 U	.010 U
	4/29/93	N	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.0005 U	.020
	10/07/93	N	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.0005 U	.005
	4/19/94	N	.004	.0002 U							
	5/03/94	N	.002 UJF%	.010 UJF	.0002 U	.005 U	.005 U	.001 U	.0005 UJF%	.002 U	.004 JF%
	8/17/94	RLS	.002 U		.0002 U						
	8/17/94	N	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.018 JX
	10/11/94	N	.004	.010 U	.0002 UJA	.005 U	.005 U	.001 U	.0005 UJA	.002 URA	.012
	5/31/95	N	.002 JFA	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.018

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

5) Metals results reported for the 6/94 sampling of MH-03 are dissolved metals.

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3/19/96 TOTAL RECOVERABLE TRACE METALS(1)
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STATION	SAMPLE DATE	SAMPLE TYPE(2)	LEAD	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC
GFSW-09	10/06/89	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U		.140
	3/26/90	N	.002 UJF	.020 U	.0002 U	.005 U			.0005 U		.010 U
	4/16/90	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U		.020
	5/01/90	N	.002 U	.020 U	.0001 UJP	.005 U	.030 U	.005 U	.0005 UJP		.010 U
	5/16/90	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U		.010 U
	5/31/90	N	.002 U	.020 UJP	.0001 U	.005 U	.030 U	.005 U	.0005 U		.010 JP
	6/12/90	N	.002 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0005 U		.010 U
	6/25/90	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U		.020 JX
	7/13/90	N									
	8/13/90	N									
	10/11/90	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U		.010 U
	11/12/90	N									
	12/10/90	N									
	4/30/91	N									
	5/30/91	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0010 U		.010
	6/28/91	N									
	9/17/91	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U		.010 U
	5/12/92	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U		.010 U
	12/07/92	N	.002 U	.005 U							.010 U
	1/20/93										
	2/03/93										
	2/18/93	N	.002 U	.010 U							.030
	3/04/93	N	.002 U	.010 U							.010
	10/06/93	N	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.006
	4/19/94	N	.006	.002 UJF%	.010 UJF	.0002 U	.005 U	.005 U	.001 U	.0005 UJF%	.002 U
	5/03/94	N	.002 UJF%	.010 UJF							.005 JFXX
	8/17/94	RLS	.002 U	.002 U							

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); FX% - field duplicate relative percent difference outside acceptable range; P% - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

5) Metals results reported for the 6/94 sampling of MH-03 are dissolved metals

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TOTAL RECOVERABLE TRACE METALS(1)
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STATION	SAMPLE DATE	SAMPLE TYPE(2)	LEAD	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC
GFSW-09	8/17/94	N	.002 U	.010 U	.002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.009 JX
	10/11/94	N	.002 U	.010	.002 UJA	.005 U	.005 U	.001 U	.0005 UJA	.002 URA	.008
	5/31/95	N	.002 JFA	.010 U	.002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.005 U
GFSW-10	9/20/89	N	.010 U	2.860	.0010 U	.005 U	.030 U	.005 U	.005 U	.0050 U	.200
	9/29/89	N	.010 U	2.930	.0010 U	.005 U	.030 U	.005 U	.005 U	.0050 U	.410
	3/26/90	N	.010 UJF	2.550	.0010 U	.005 U	.005 U	.005 U	.0050 U	.0050 U	.100
	4/16/90	N	.010	2.450	.0010 U	.005 U	.030 U	.005 U	.005 U	.0060 U	.190
	4/30/90	N	.010 U	2.590	.0010 UJP	.005 U	.030 U	.005 U	.005 U	.0050 UJP	.210
	5/16/90	N	.005	3.490	.0010 U	.005 U	.030 U	.005 U	.005 U	.0050 U	.230
	5/29/90	N	.020	2.980	.0010 U	.005 U	.030 U	.005 U	.005 U	.0050 U	.260 JP
	6/11/90	N	.010 U	3.410	.0010 U	.005 U	.030 U	.005 U	.005 U	.0050 U	.240
	6/26/90	N	.010 U	3.490	.0010 U	.005 U	.030 U	.005 U	.005 U	.0030 U	.240
	7/12/90	N	.010 U	3.460	.0010 U	.005 U	.030 U	.005 U	.005 U	.0050 U	.250
	10/10/90	N	.010 U	3.010	.0010 U	.005 U	.030 U	.005 U	.005 U	.0050 U	.210
	4/30/91	N									
	6/28/91	N									
GFSW-11	9/21/89	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U	.0050 U	.020
	10/05/89	N									
	3/26/90	N	.010 UJF	.020 U	.0010 U	.005 U					
	4/09/90	N	.010 U	.020 U	.0010 U	.005 U					
	4/30/90	N	.002 U	.020 U	.0001 UJP	.005 U	.030 U	.005 U	.0050 U	.0050 U	.030
	5/16/90	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 UJP	.0005 UJP	.010 U
	5/16/90	DUP	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U	.0005 U	.010 U
	5/29/90	N	.002 U	.020 UJP	.0001 U	.005 U	.030 U	.005 U	.0005 U	.0005 U	.010 U
	6/11/90	RLS	.020 U	.0005 U	.050 U	.030					

NOTES:

- All values are given in mg/L unless otherwise noted.
- Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.
- Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.
- Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.
- Metals results reported for the 6/94 sampling of MH-03 are dissolved metals.

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TOTAL RECOVERABLE TRACE METALS(1)
(CONT.)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	LEAD	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC
GFSW-11	6/11/90	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.005 U	.005 U	-----
	6/26/90	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.005 U	.005 U	.010 U
	7/12/90	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.005 U	.005 U	.010 JX
	8/13/90	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.005 U	.005 U	.010 U
	10/10/90	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.005 U	.005 U	.010 U
	11/12/90	N									
	12/10/90	N									
	4/30/91	N									
	6/28/91	N									
	12/07/92	N	.002 U	.002 U	.005 U						.010 U
	1/20/93	N	.002 U	.002 U	.005 U						.020
	2/03/93	N									
	2/18/93	N									
	3/04/93	N									
	3/05/93	RLS	.002 U	.020 U	.010	.0002 UJA	.005 U	.005 U	.001 U	.0005 UJA	.030
	10/12/94	N	.002 U	.002 JA	.0002 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.007
	5/31/95	N	.002 JFA								.058
GFSW-12	4/18/90	N	.010 U	.030	.0010 U	.005 U	.030 U	.005 U	.005 U	.0050 U	.040
	5/01/90	N	.010	.020 U	.0010 UJP	.005 U	.030 U	.005 U	.005 U	.0050 UJP	.090
	5/18/90	N	.010	.020 U	.0010 U	.005 U	.030 U	.005 U	.005 U	.0050 U	.080
	5/31/90	N	.070	.050 JP	.0010 U	.005 U	.030 U	.005 U	.005 U	.0050 U	.210 JP
	6/12/90	N	.040	.030	.0010 U	.005 U	.030 U	.005 U	.005 U	.0050 U	.180
	6/26/90	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.005 U	.0050 U	.080
	7/13/90	N									
	8/13/90	N									
	9/13/90	N									

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

5) Metals results reported for the 6/94 sampling of MH-03 are dissolved metals.

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TOTAL RECOVERABLE TRACE METALS(1)
(CONT.)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	LEAD	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC
GFSW-12	10/11/90	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U	.0050 U	.080
	12/10/90	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U	.0050 U	.080
	3/18/91	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U	.0050 U	.090
	4/30/91	N	.020	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U	.0050 U	.090
	5/30/91	N	.020	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U	.0050 U	.090
	6/28/91	N	.005	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U	.0005 U	.060
	9/17/91	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U	.0050 U	.050
	5/12/92	N	.003	.010 U	.0002 U	.005 U	.005 U	.005 U	.0005 U	.0005 U	.060
	4/29/93	N	.004	.010 U	.0002 U	.005 U	.005 U	.005 U	.0005 U	.0005 U	.060
	10/06/93	N	.007 JF%	.010 UJF	.0002 U	.005 U	.005 U	.005 U	.0005 UJF%	.0005 UJF%	.060 JF%
	5/03/94	N	.007	.010 U	.0002 U	.005 U	.005 U	.005 U	.0005 U	.0005 U	.056
	8/16/94	N	.004	.010 U	.0002 UJA	.005 U	.005 U	.005 U	.0005 UJA	.0005 UJA	.045
	10/11/94	N	.004	.010	.0002 U	.009	.010	.001 U	.0005 U	.0005 U	.075 JF
	3/22/95	N	.028 JFA	.040 JA	.0006	.005 U	.005 U	.001 U	.0005 U	.0005 U	.120
	6/01/95	N	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.0005 U	.120
GFSW-13	4/29/93	N	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.0005 U	.010
	10/07/93	N	.004	.002 U	.010 U	.0002 U	.005 U	.005 U	.0005 U	.0005 U	.007
	4/19/94	N	.004	.002 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.0005 U	.007
	8/17/94	N	.002 U	.010 U	.0002 UJA	.005 U	.005 U	.001 U	.0005 UJA	.0005 UJA	.005 U
	10/11/94	N	.002 U	.010 JA	.0002 U	.005 U	.005 U	.001 U	.0005 U	.0005 U	.013
	5/31/95	N	.002 JFA	.010 JA	.0002 U	.005 U	.005 U	.001 U	.0005 U	.0005 U	.013
GFSW-14	4/29/93	N	.002 U	.010 U	.0002 U	.005	.005 U	.001 U	.0005 U	.0005 U	.040
	10/06/93	N	.005	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.0005 U	.040
GFSW-15	5/03/94	N	.002 JF%	.030 JF	.0002 U	.005 U	.005 U	.001 U	.0005 UJF%	.0005 UJF%	.040 JF%

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

5) Metals results reported for the 6/94 sampling of MH-03 are dissolved metals.

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TOTAL RECOVERABLE TRACE METALS(1)
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STATION	SAMPLE DATE	SAMPLE TYPE(2)	LEAD	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC
GFSW-15	8/16/94	N	.002	.100	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.035 JX
	10/11/94	N	.006	.120	.0002 UJA	.005 U	.005 U	.001 U	.0005 UJA	.002 URA	.021
	3/22/95	N	.002 U	.050	.0002 U	.012	.005	.001 U	.0005 U	.002 U	.054 JF
	3/22/95	D	.002 U	.050	.0002 U	.015	.005 U	.001 U	.0005 U	.002 U	.028
	6/01/95	N	.006 JFA	.020 JA	.0002 U	.006	.005 U	.001 U	.0002 U	.002 U	.005 U
GFSW-16	4/28/94	N	.002 U		.0002 U		.005 U	.001 U	.0005 UJF%	.002 U	.007 JF%X
	5/03/94	N	.002 UJF%		.010 UJF		.0002 U	.005 U			
	6/04/94	N									
	8/17/94	RLS	.002 U		.0002 U		.0002 U				
	8/17/94	N	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.010 JX
	10/11/94	N	.002 U	.010 U	.0002 UJA	.005 U	.005 U	.001 U	.0005 UJA	.002 URA	.006
	3/22/95	N	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.012 JF
	6/01/95	N	.002 JFA	.010 JA	.0002 U	.005 U	.005 U	.001 U	.0002 U	.002 U	.005 U
GFSW-17	6/04/94	N	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.012
	8/17/94										
	10/11/94										
	6/01/95	N	.002 JFA	.070 JA	.0002 U	.005 U	.005 U	.001 U	.0002 U	.002 U	.005 U
GFSW-18	6/01/95	N	.030 JFA	.050 JA	.0002 U	.005	.005 U	.001 U	.0005 U	.002 U	.005 U
GFSW-19	6/01/95	N	.020 JFA	.040 JA	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.019
GFSW-20	6/01/95	N	.004 JFA	.050 JA	.0002 U	.007	.005 U	.001 U	.0005 U	.002 U	.005 U
	6/01/95	D	.010	.050	.0002 U	.008	.005 U	.001 U	.0005 U	.002 U	.005 U

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

5) Metals results reported for the 6/94 sampling of MH-03 are dissolved metals.

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TOTAL RECOVERABLE TRACE METALS(1)
(CONT.)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	LEAD	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC
LQG	5/24/90	N	.020	-----	.0010 U	.005 U	.030 U	.005 U	-----	.0050 U	.010
	5/31/90	N	-----	.020 U	-----	-----	-----	-----	-----	-----	-----
	6/11/90	N	.010 U	-----	.0010 U	.005 U	.030 U	.005 U	-----	.0050 U	.010 U
MH-01	5/25/95	N	.002 U	.140	.0002 U	.005 U	.005 U	.001	.0005 U	.002 U	.034
MH-03	6/05/94	N	.002 U	5.040	.0002 U	.010	.007	.001 U	.0005 U	.002 U	.001 U
	5/25/95	N	.002 U	4.080	.0002 U	.018	.005 U	.001	.0005 U	.002 U	.040
SDC	7/26/89	N	-----	-----	-----	-----	-----	-----	-----	-----	-----
SG-01	5/29/90	N	-----	-----	-----	-----	-----	-----	-----	-----	-----
	5/31/90	N	-----	-----	-----	-----	-----	-----	-----	-----	-----
	6/11/90	N	-----	-----	-----	-----	-----	-----	-----	-----	-----
	6/25/90	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	10/10/90	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	4/30/91	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	6/23/91	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
SG-02	4/16/90	N	-----	-----	-----	-----	-----	-----	-----	-----	-----
	5/01/90	N	-----	-----	-----	-----	-----	-----	-----	-----	-----
	5/16/90	N	-----	-----	-----	-----	-----	-----	-----	-----	-----
	5/31/90	N	-----	-----	-----	-----	-----	-----	-----	-----	-----
	6/12/90	N	-----	-----	-----	-----	-----	-----	-----	-----	-----
	6/25/90	N	-----	-----	-----	-----	-----	-----	-----	-----	-----
	7/13/90	N	-----	-----	-----	-----	-----	-----	-----	-----	-----
	8/13/90	N	-----	-----	-----	-----	-----	-----	-----	-----	-----

NOTES:

- 1) All values are given in mg/L unless otherwise noted.
- 2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.
- 3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.
- 4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.
- 5) Metals results reported for the 6/94 sampling of MH-03 are dissolved metals.

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TOTAL RECOVERABLE TRACE METALS(1)
(CONT.)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	LEAD	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC
SG-02	9/13/90	N	-	-	-	-	-	-	-	-	-
	10/11/90	N									
	11/12/90	N									
	12/10/90	N									
	4/30/91	N									
	6/28/91	N									
SHC	7/26/89	N									
	7/26/89	DUP									
SR-A	4/23/90	N									
SR-B	4/23/90	N									
SR-C	4/23/90	N									
SR-D	4/23/90	N									
SR-E	4/23/90	N									
SR-F	4/23/90	N									
SR-G	4/23/90	N									
UN ADIT	6/01/95	N	.028 JFA	.030 JA	.0002 U	.005 U	.046	.001 U	.0005 U	.002 U	1.680
	6/21/95	N		.050							

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

5) Metals results reported for the 6/94 sampling of MH-03 are dissolved metals.

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TOTAL RECOVERABLE TRACE METALS(1)
(CONT.)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	LEAD	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC
UGG	5/24/90	N	-	-	-	-	-	-	-	-	-
WSW-07	8/17/94	N	.002 U	-	-	.0002 U	-	-	-	-	-
	10/12/94	N	.002	.010 U	.0002 UJA	.005 U	.005 U	.001 U	.0005 UJA	.002 URA	.012
BLANK	3/28/90	FB	.010 U	.020 U	.0010 U	.005 U	.005 U	.005 U	.0050 U	.0050 U	.010
	6/27/90	FB	.010 U	.020 U	.0010 U	.005 U	.005 U	.005 U	.0050 U	.0050 U	.010
	12/10/90	FB	.010 U	.020 U	.0010 U	.005 U	.005 U	.030 U	.005 U	.0050 U	.010 U
	3/18/91	FB	.010 U	.020 U	.0010 U	.005 U	.005 U	.005 U	.005 U	.0050 U	.010 U
	5/12/92	FB	.010 U	.020 U	.0010 U	.005 U	.005 U	.030 U	.005 U	.0050 U	.010 U
	5/03/94	FB	.002 U	.010 U	.0002 U	.005 U	.005 U	.005 U	.0005 U	.0005 U	.011
	8/17/94	FB	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.0002 U	.009
BLIND FIELD	6/15/90	BFS	.110	.240	.0060	.118	.130	.070	.0160	.310	
	10/12/94	BFS	.013	.050	.0010	.005 U	.095	.072	.0190	.002 U	.080
	3/22/95	BFS	.044	.085	.0042	.005 U	.118	.038	.1030	.014	.777
	5/31/95	BFS	.080	.220	.0068	.005 U	.080	.078	.1670	.025	.250

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

5) Metals reported for the 6/94 sampling of MH-03 are dissolved metals.

APPENDIX B

GROUNDWATER QUALITY DATA FOR 1989-95 WATER RESOURCES MONITORING PROGRAM

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FIELD MEASUREMENTS(1)

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STATION	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE(2)	LAB NUMBER	WATER TEMPERA-TURE (C)		FIELD pH (s.u.)		FIELD CONDUCTIVITY (umhos/cm)		LAB CONDUCTIVITY (umhos/cm)		EH (mv)
					FIELD pH	LAB pH (s.u.)	FIELD CONDUCTIVITY (umhos/cm)	LAB CONDUCTIVITY (umhos/cm)					
GFMW-01	9/13/89	9/20/89	N	89-14904									
	9/29/89	10/02/89	N	89-16876									
	3/28/90	6/14/90	N	90-16487	6.7	8.6	8.6	8.8					1290
	6/14/90	10/14/90	N	90-28377	4.7	9.3	8.3	8.3					344
	5/11/92		N										323
GFMW-02	9/27/89	3/28/90	N	89-16657									
	4/18/90	7/09/90	N	90-6812	4.0	7.2	7.2	7.2					335
	9/29/90	10/11/90	N	90-9527	6.0	7.8	7.8	7.8					351
	5/30/91	5/30/91	N	90-19251	6.8	7.1	7.1	7.1					344
	9/16/91	9/16/91	N	90-28243	5.7	8.2	8.2	7.6					304
	9/16/91	9/21/93	N	91-18387	7.0	7.9	7.9	7.9					355
	5/11/92	6/14/93	DUP	91-18388	7.0	7.8	7.8	7.8					318
	6/14/93	9/21/93	N	91-36556	7.0	8.3	8.3	7.6					320
	5/05/94	5/05/94	DUP	91-36557	7.0	8.3	8.3	7.7					325
	8/16/94	8/16/94	N	92-18067	6.1	8.0	8.0	7.9					327
	10/12/94	10/12/94	N	93-25467	5.5	7.8	7.8	7.8					297
	6/01/95	6/01/95	N	93-43947	6.5	7.6	7.6	7.6					334
	9/26/89	9/26/89	N	94-18104	7.2	7.7	7.7	7.7					363
			N	94-39668	7.9	7.5	7.5	7.7					217
			N	155870	6.0	7.3	7.3	7.3					357
			N	163777	8.0	7.5	7.5	7.5					160
			N										160
			N	89-16655									310

NOTES: 1) Blank space indicates data were not collected. All data collected from 10/94 to present were collected by Maxim Technologies; all data collected prior to 10/94 were collected by Hydronetrics. s.u. - standard units; umhos/cm - micromhos per centimeter; C - degrees Celsius; mv - millivolts.

2) Sample Type: N - natural; DUP - field duplicate; BRS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

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FIELD MEASUREMENTS(1)

Page 2

STATION	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE(2)	LAB NUMBER	WATER TEMPERA-TURE (C)		FIELD pH (s.u.)	LAB pH (s.u.)	FIELD CONDUCTIVITY (umhos/cm)	LAB CONDUCTIVITY (umhos/cm)	EH (mv)
					FIELD	TEMPERA-TURE					
GFMW-03	3/28/90	N		90-8048	4.5			7.5			305
	4/09/90	N		90-19250	5.5		7.5	6.9			272
	7/09/90	N		90-28244	4.6		8.0	7.9			314
	10/10/90	N	DUP	90-28245	4.6		8.0	7.5			313
	10/10/90			91-18390	6.0			7.7			306
	5/30/91	N									
	5/11/92	N									
	6/14/93	N		93-25468	5.5			7.7			286
	9/21/93	N		93-43948	6.0			7.6			302
	9/21/93										
	5/05/94	N		94-18101	7.8		7.8	7.9			286
	8/16/94	N		94-39669	5.8		7.7	7.7			320
	8/16/94										
	8/16/94	DUP		94-39673	5.8		7.7	7.7			302
	10/11/94	1600		155866	5.0		7.6	7.6			299
	6/01/95	1400	N	163778	8.0		7.6	7.6			190
											170
											362
											10
GFMW-04	10/05/89	N									
	10/17/89	N		89-18986				7.7			282
	3/28/90	N		90-6813	5.0			6.8			278
	4/18/90	N		90-9528	7.0			7.7			280
	7/10/90	N		90-19254	9.3			7.3			243
	10/11/90	N		90-28250	6.5			7.8			275
	9/17/91	N		91-36559	6.5			9.1			260
	5/11/92	N									
	6/01/95	1330	N	163779	8.5		7.9				
											312
GFMW-05	10/17/89	N		89-18987				7.5			322
	3/28/90	N		90-6814	5.0			7.2			300
	4/16/90	N		90-9526	6.0			7.4			302

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FIELD MEASUREMENTS(1)

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STATION	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE(2)	LAB NUMBER	WATER TEMPERA-		FIELD pH (s.u.)	LAB pH (s.u.)	FIELD CONDUCTIVITY (umhos/cm)	LAB CONDUCTIVITY (umhos/cm)	EH (mv)
					FIELD	TEMPER-					
GFMW-05	7/09/90		RLS	105623	7.8	6.6	6.8				279
	7/09/90		N	90-19249	7.8	6.6	6.6				251
	10/10/90		N	90-28249	5.2	7.2	7.0				324
	5/30/91		N	91-18391	6.0		7.2				272
	5/11/92		N	92-18068	5.8	7.4	7.3				310
	6/14/93		N	93-25469	5.5		7.2				308
	9/21/93		N	93-43949	6.0		7.2				323
	5/05/94		N	94-18103	6.2	7.2	7.0				310
	8/16/94		N	94-39670	6.9	7.2	7.0				332
	10/11/94	1530	N	155867	5.0	7.7	7.0				329
	6/01/95	1530	N	163780	8.0	7.3	7.3				195
											190
											396
											380
GFMW-06	10/05/89		N	89-17135			8.3				460
	4/19/90		RLS	103217	4.0		7.6				465
	4/19/90		N	90-9529	4.0		7.9				474
	7/10/90		N	90-19256	11.5	7.3	7.1				384
	10/10/90		N	90-28248	10.4	6.9	7.6				467
	5/30/91		N	91-18392	8.0		7.9				444
	9/16/91		N	91-36558	9.2	8.4	7.8				448
	9/21/93		N	93-43950	7.0		7.7				445
	5/05/94		N	94-18099	8.6	6.7	7.9				465
	5/05/94		DUP	94-18100	8.6	6.7	7.9				302
	8/16/94		N	94-39671	8.6	8.1	7.7				460
	10/12/94	1520	N	155868	6.0	6.6	498				302
	6/02/95	1045	N	163802	6.0	7.3	450				155
											70
											396
											380
GFMW-07	8/30/89		N	89-14036			7.8				
	9/26/89		N	89-16654			7.9				

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STATION	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE(2)	LAB NUMBER	WATER		FIELD CONDUCTIVITY (umhos/cm)	LAB CONDUCTIVITY (umhos/cm)	EH (mv)
					FIELD TURE (C)	LAB pH (s.u.)			
GFMW-07	3/28/90	N		90-6815	7.0		7.3		309
	4/16/90	N		90-9523	7.0		7.6		393
	7/09/90	N		90-19247	8.0		6.7		363
	10/10/90	N		90-28247	6.9		8.0		431
	5/11/92	N		92-18069	7.4		7.6		436
	6/14/93	N		93-25471	7.0		7.8		381
GFMW-08	5/18/90	N		90-12672			7.0		232
	7/10/90	N		90-19252	7.6		6.7		206
	10/11/90	N		90-28251	6.5		7.1		235
	5/11/92	N					6.9		
GFMW-09	5/23/90	N		90-13151	5.5			7.1	208
	7/10/90	N		90-19253	8.4		7.0	6.5	163
	7/10/90	DUP		90-19255	8.4		7.0	6.5	164
	10/11/90	N		90-28252	7.6		7.7	7.1	184
	5/30/91	N		91-18393	6.0			7.1	199
	9/17/91	N		91-36560	8.5		6.9	7.0	181
	5/11/92	N		92-18070	6.8		7.2	7.0	192
	6/14/93	N		93-25470	7.0			7.1	170
	9/21/93	N		93-43951	7.0		7.0		186
	9/21/93	DUP		93-43952	7.0			6.7	185
	5/05/94	N		94-18098	4.8		7.8	7.2	208
	8/16/94	N		94-39672	10.1		7.4	7.0	175
	10/12/94	1630	N	155869	7.0		6.2		145
	6/02/95	930	N	163803	5.0		7.0		110
	6/02/95	945	D	163804				191	

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FIELD MEASUREMENTS(1)

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STATION	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE(2)	LAB NUMBER	WATER TEMPERA-		FIELD CONDUCTIVITY (umhos/cm)	LAB CONDUCTIVITY (umhos/cm)	EH (mv)
					FIELD pH	TEMPERATURE (C)	LAB pH (s.u.)	FIELD pH (s.u.)	
GFMW-10	10/12/94	1000	N	155871	13.0	7.3	382	382	195
	6/02/95	1230	N	163805		7.2	337	337	130
MTHG-A	6/27/90		N	90-17431					
	7/12/90		N						
MTHG-B	6/27/90		N	90-17432					
	7/11/90		N						
BLANK	7/09/90		FB	90-19248					
	10/10/90		FB	90-28246					
	12/10/90		FB	90-33990					
	3/18/91		FB	91-10188					
	5/30/91		FB	91-18389					
	6/14/93		FB	93-25472					
	5/05/94		FB	94-18102					
	8/16/94		FB	94-39674					
CROSS-BLANK	10/12/94	1800	CCB	155872					
	6/02/95	1220	CCB	163806					
BLIND FIELD	6/15/90		BFS	90-16488					
	10/12/94		BFS	155883					
	5/31/95		BFS	163739					

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COMMON IONS(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	CALCIUM	MAGNESIUM	SODIUM	POTASSIUM	SULFATE(5)	CHLORIDE
GFMW-01	9/13/89	N						
	9/20/89	N						
	9/29/89	N						
	10/02/89	N	20.0		217.0		157	74
	3/28/90	N						
	6/14/90	N	27.0	18.0	12.0		19	34
	10/14/90	N	25.0	19.0	17.0		23	25
	5/11/92	N						
GFMW-02	9/27/89	N	32.0	24.0	4.0		14	2
	3/28/90	N	37.0	24.0	4.0		17	4
	4/18/90	N	33.0	22.0	3.0	JP%	15	4
	7/09/90	N	35.0	24.0	4.0		18	JP%
	9/29/90	N						
	10/11/90	N	37.0	24.0	4.0		16	5
	5/30/91	N	31.0	22.0	4.0		10 JF%	3
	5/30/91	DUP	32.0	22.0	4.0	2.0	13	3
	9/16/91	N	35.0	23.0	4.0		16	3
	9/16/91	DUP	35.0	23.0	4.0		16	3
	5/11/92	N	34.0	23.0	4.0		15	3
	6/14/93	N	30.0	21.0	5.0	2.0	13	2
	9/21/93	N	35.0	23.0	5.0	2.0	18	3
	5/05/94	N	37.0	25.0	4.0	2.0	18	3
	8/16/94	N	35.0	24.0	4.0	2.0	17	3
	10/12/94	N	35.0	24.0	5.0	1.0	17 JF%	2
	6/01/95	N	30.0	21.0	8.0 JA	1.0	5	2

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4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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COMMON IONS(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	CALCIUM	MAGNESIUM	SODIUM	POTASSIUM	SULFATE(5)	CHLORIDE
GFMW-03	9/26/89	N	39.0	16.0	2.0		11	1
	3/28/90	N	42.0	16.0	3.0 JP%		11	1 U
	4/09/90	N	42.0	16.0	3.0		12 JP%	1 U
	7/09/90	N	43.0	16.0	2.0		11	1
	10/10/90	N	DUP	45.0	15.0	3.0	12	1
	10/10/90	DUP	N	41.0	16.0	2.0	10 JF%	1 U
	5/30/91	N	5/11/92	N				
	6/14/93	N	39.0	15.0	3.0	1.0 U	9	1 U
	9/21/93	N	40.0	15.0	3.0	1.0	11	1 U
	5/05/94	N	43.0	16.0	2.0	1.0	11	1 U
	8/16/94	N	41.0	16.0	3.0	1.0 U	11	1 U
	8/16/94	DUP	N	40.0	16.0	3.0	1.0	1 U
	10/11/94	N	40.0	15.0	1.0 U	1.0 U	12 JF%	1 U
	6/01/95	N	41.0	16.0	1.0 JA	1.0 U	5 U	1
	10/05/89	N	10/17/89	N	40.0	7.0	12.0	
			3/28/90	N	40.0	7.0	12.0	27
			4/18/90	N	38.0	7.0	12.0 JP%	32
			7/10/90	N	35.0	7.0	14.0	28
			10/11/90	N	37.0	7.0	12.0	32 JP%
			9/17/91	N	36.0	7.0	14.0	30
			5/11/92	N				2
			6/01/95	N	34.0	6.0	9.0 JA	28
						1.0 U		2

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	CALCIUM	MAGNESIUM	SODIUM	POTASSIUM	SULFATE(5)	CHLORIDE
GFMW-05	10/17/89	N	50.0	11.0	4.0		32	14
	3/28/90	N	47.0	10.0	4.0		21	1
	4/16/90	N	44.0	10.0	5.0	JP%	23	1
	7/09/90	RLS	39.0	9.0	5.0		16	1 U
	7/09/90	N	42.0	10.0	5.0		25	JP% 1
	10/10/90	N	56.0	9.0	4.0		30	2
	5/30/91	N	39.0	10.0	4.0	U	31	JF% 2
	5/11/92	N	49.0	11.0	5.0		28	1
	6/14/93	N	45.0	11.0	5.0	U	36	1
	9/21/93	N	48.0	11.0	5.0	U	37	1
	5/05/94	N	49.0	12.0	5.0	U	38	1
	8/16/94	N	50.0	12.0	5.0	U	37	1
	10/11/94	N	49.0	11.0	3.0	U	37	1
	6/01/95	N	50.0	13.0	1.0	U	41	3
GFMW-06	10/05/89	N	56.0	23.0	16.0		48	3
	4/19/90	RLS	51.0	22.0	12.0		51	2
	4/19/90	N	54.0	23.0	15.0	JP%	50	3
	7/10/90	N	48.0	22.0	17.0		45	JP% 3
	10/10/90	N	58.0	20.0	16.0		49	4
	5/30/91	N	46.0	21.0	25.0	3.0	43	JF% 4
	9/16/91	N	52.0	23.0	18.0		47	3
	9/21/93	N	47.0	21.0	21.0	3.0	48	3
	5/05/94	N	51.0	23.0	19.0	3.0	45	3
	5/05/94	DUP	51.0	23.0	18.0	3.0	46	3

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4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	CALCIUM	MAGNESIUM	SODIUM	POTASSIUM	SULFATE(5)	CHLORIDE
GFMW-06	8/16/94	N	50.0	22.0	17.0	3.0	49	3
	10/12/94	N	48.0	21.0	15.0	2.0	47 JF%	3
	6/02/95	N	52.0	23.0	14.0 JA	2.0	43	3
GFMW-07	8/30/89	N	52.0	19.0	5.0	2.0	43	1
	9/26/89	N	50.0	19.0	5.0		39	2
	3/28/90	N	55.0	22.0	5.0		27	2
	4/16/90	N	50.0	19.0	6.0 JP%		40	1
	7/09/90	N	52.0	22.0	6.0		29 JP%	3
	10/10/90	N	60.0	22.0	6.0		24	3
	5/11/92	N	55.0	24.0	7.0		20	2
	6/14/93	N	50.0	19.0	6.0	3.0	25	2
GFMW-08	5/18/90	N	33.0	9.0	5.0		16	2
	7/10/90	N	31.0	9.0	5.0		18 JP%	1
	10/11/90	N	31.0	9.0	4.0		16	1
	5/11/92	N						
GFMW-09	5/23/90	N	27.0	8.0	5.0		18	2
	7/10/90	N	24.0	7.0	4.0		15 JP%	1
	7/10/90	DUP	24.0	7.0	5.0		15	1 U
	10/11/90	N	24.0	7.0	4.0		9	1
	5/30/91	N	26.0	7.0	5.0	2.0	15 JF%	2
	9/17/91	N	25.0	7.0	4.0		8	1 U
	5/11/92	N	26.0	7.0	5.0		14	1 U
	6/14/93	N	22.0	6.0	4.0	1.0	11	1 U

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	CALCIUM	MAGNESIUM	SODIUM	POTASSIUM	SULFATE(5)	CHLORIDE
GFMW-09								
	9/21/93	N	24.0	6.0	5.0	1.0	11	1 U
	9/21/93	DUP	24.0	7.0	5.0	2.0	11	1 U
	5/05/94	N	27.0	8.0	5.0	1.0	17	1 U
	8/16/94	N	23.0	6.0	4.0	1.0	11	1 U
	10/12/94	N	24.0	6.0	5.0	1.0	9	JF%
	6/02/95	N	25.0	6.0	4.0 JA	1.0 U	8	1 U
	6/02/95	D	24.0	5.0	4.0	1.0 U	9	1 U
GFMW-10	10/12/94	N	35.0	7.0	20.0	2.0	17	JF%
	6/02/95	N	47.0	6.0	11.0 JA	2.0	5 U	3
MTHG-A	6/27/90	N	137.0	22.0	7.0		249	2
	7/12/90	N						
MTHG-B	6/27/90	N	130.0	23.0	6.0		112	2
	7/11/90	N						
BLANK	7/09/90	FB	1.0 U	1.0 U	1.0 U		1 U	1 U
	10/10/90	FB	1.0 U	1.0 U	1.0 U		1 U	1 U
	12/10/90	FB	1.0 U	1.0 U	1.0 U		1 U	1 U
	3/18/91	FB	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U
	5/30/91	FB	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U
	6/14/93	FB	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U
	5/05/94	FB	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U
	8/16/94	FB	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	CALCIUM	MAGNESIUM	SODIUM	POTASSIUM	SULFATE(5)	CHLORIDE
CROSS-BLANK	10/12/94	CCB	1.0 U	1.0 U	1.0 U	1.0 U	5 U	1 U
	6/02/95	CCB						
BLIND FIELD	6/15/90	BFS	1.0 U	1.0 U	234.0	142.0	158	241
	10/12/94	BFS	20.0	1.0 U	252.0	33.0	82	164
	5/31/95	BFS	42.0	1.0 U	273.0	38.0	59	223

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

5) Sulfate results from 10/94 flagged JF% are qualified on the basis of a surface water field duplicate.

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TRACE METALS(1)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	DISSOLVED ALUMINUM	DISSOLVED ARSENIC	DISSOLVED ANTIMONY	DISSOLVED BARIUM	DISSOLVED BERYLLIUM	DISSOLVED CADMIUM	DISSOLVED CHROMIUM	DISSOLVED COPPER(5)	DISSOLVED IRON
			U	U	U	U	U	U	U	U	U
GFMW-01	9/13/89	N	.1	.014		.100		.0020	.020	.010	.03
	9/20/89	N	.1	.005		.100		.0010	.020	.010	.03
	9/29/89	N									
	10/02/89	N	.4	.005		.100		.0010	.020	.020	.96
	3/28/90	N									
	6/14/90	N	.1	.015		.100		.0010	.020	.010	.06
	10/14/90	N	.1	.015		.100		.0010	.020	.010	.03
	5/11/92	N									
GFMW-02	9/27/89	N	.1	.012		.100		.0050	.020	.010	.03
	3/28/90	N									
	4/18/90	N	.1	.008	JF	.100		.0010	.020	.010	.03
	7/09/90	N	.1	.008	JF	.100		.0010	.020	.010	.03
	9/29/90	N									
	10/11/90	N	.1	.009		.100		.0010	.020	.010	.04
	5/30/91	N	.1	.009		.100		.0010	.020	.010	.03
	5/30/91	DUP	.1	.009		.100		.0010	.020	.010	.03
	9/16/91	N	.1	.007		.100		.0006	.020	.001	.03
	9/16/91	DUP	.1	.006		.100		.0005	.020	.002	.03
	5/11/92	N	.1	.007		.100		.0010	.020	.010	.06
	6/14/93	N	.1	.005		.100		.0001	.001	.001	.07
	9/21/93	N	.1	.008		.100		.0001	.001	.001	.08
	5/05/94	N	.1	.009		.100		.0001	.001	.001	.06
	8/16/94	N	.1	.008		.100		.0001	.001	.001	.13
	10/12/94	N	.1	.005	JA	.100		.0001	.001	.003	.08 JA
	6/01/95	N	.1	.004		.100		.0001	.001	.001	.07

NOTES:

- 1) All values are given in mg/L unless otherwise noted.
- 2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.
- 3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.
- 4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.
- 5) Copper results from 10/94 flagged JF% are qualified on the basis of a surface water field duplicate.

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TRACE METALS(1)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	DISSOLVED ALUMINUM	DISSOLVED ARSENIC	DISSOLVED ANTIMONY	DISSOLVED BARIUM	DISSOLVED BERYLLIUM	DISSOLVED CADMIUM	DISSOLVED CHROMIUM	DISSOLVED COPPER(5)	DISSOLVED IRON
GFMW-03	9/26/89	N	.1 U	.006		.100 U			.0030	.020 U	.010 U
	3/28/90	N									.03 U
	4/09/90	N	.1 U		.005 UJF		.100 U		.0020	.020 U	.010 U
	7/09/90	N	.1 U		.005 U		.100 U		.0010 U	.020 U	.010 U
	10/10/90	N	.1 U		.005 U		.100 U		.0010 U	.020 U	.010 U
	10/10/90	DUP	.1 U		.005 U		.100 U		.0010 U	.020 U	.010 U
	5/30/91	N	.1 U		.005 U		.100 U		.0010 U	.020 U	.010 U
	5/11/92	N									.03 U
	6/14/93	N	.1 U		.001 U	.005 U	.100 U	.001 U	.0001 U	.001 U	.001 U
	9/21/93	N	.1 U		.004	.005 U	.100 U	.001 U	.0001 U	.001 U	.001 U
	5/05/94	N	.1 U		.004	.005 U	.100 U	.001 U	.0002	.001 U	.001 U
	8/16/94	N	.1 U		.004	.005 U	.100 U	.001 U	.0001 U	.001 U	.001 U
	8/16/94	DUP	.1 U		.004	.005 U	.100 U	.001 U	.0001 U	.001 U	.001 U
	10/11/94	N	.1 U		.003 JA	.005 U	.100 U	.001 U	.0001 U	.001 U	.001 U
	6/01/95	N	.1 U		.003	.005 U	.100 U	.001 U	.0001 UJA	.001 U	.001 U
											.03
GFMW-04	10/05/89	N	.1 U		.021		.100 U		.0010 U	.020 U	.010 U
	10/17/89	N									.12
	3/28/90	N									
	4/18/90	N	.1 U		.022		.100 U		.0010 U	.020 U	.010 U
	7/10/90	N	.1 U		.015 JF		.100 U		.0010 U	.020 U	.010 U
	10/11/90	N	.1 U		.009		.100 U		.0010 U	.020 U	.010 U
	9/17/91	N	.1 U		.005 U		.100 U		.0004	.020 U	.001 U
	5/11/92	N									.03 U
	- 6/01/95	N	.1 JA		.006	.005 U	.100 U	.001 U	.0001 UJA	.001 U	.001 U
											.62

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

5) Copper results from 10/94 flagged JF% are qualified on the basis of a surface water field duplicate.

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TRACE METALS(1)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	DISSOLVED ALUMINUM	DISSOLVED ARSENIC	DISSOLVED ANTIMONY	DISSOLVED BARIUM	DISSOLVED BERYLLIUM	DISSOLVED CADMIUM	DISSOLVED CHROMIUM	DISSOLVED COPPER(5)	DISSOLVED IRON
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GFMW-05	10/17/89	N	.1 U	.005		.100 U			.0010 U	.020 U	.010 U
	3/28/90	N	.1 U	.005 U		.100 U			.0020	.020 U	.010 U
	4/16/90	N	.1 U	.005 U		.100 U			.0010 U	.020 U	.010 U
	7/09/90	RLS	.1 U	.005 U		.100 U			.0050 U	.020 U	.020 U
	7/09/90	N	.1 U	.005 UJF		.100 U			.0030	.020 U	.010 U
	10/10/90	N	.1 U	.005 U		.100 U			.0020	.020 U	.010 U
	5/30/91	N	.1 U	.005 U		.100 U			.0010 U	.020 U	.010 U
	5/11/92	N	.1 U	.005 U		.100 U			.0010 U	.020 U	.010 U
	6/14/93	N	.1 U	.001 U		.100 U			.0001 U	.001 U	.001 U
	9/21/93	N	.1 U	.003		.100 U			.0001 U	.001 U	.001 U
	5/05/94	N	.1 U	.004		.100 U			.0001 U	.001 U	.001 U
	8/16/94	N	.1 U	.005		.100 U			.0001 U	.001 U	.001 U
	10/11/94	N	.1 U	.003 JA		.100 U			.0001 UJA	.0001 U	.001 U
	6/01/95	N	.1 JA	.002		.100 U					
GFMW-06	10/05/89	N	.1 U	.005 U		.100 U			.0010 U	.020 U	.010 U
	4/19/90	RLS									
	4/19/90	N	.1 U	.005 U		.100 U			.0010 U	.020 U	.010 U
	7/10/90	N	.1 U	.005 UJF		.100 U			.0010 U	.020 U	.010 U
	10/10/90	N	.1 U	.005		.100 U			.0010 U	.020 U	.010 U
	5/30/91	N	.1 U	.007		.100 U			.0003	.020 U	.004
	9/16/91	N	.1 U	.005 U		.100 U			.0001 U	.001 U	.005
	9/21/93	N	.1 U	.005		.100 U			.0001 U	.001 U	.005
	5/05/94	N	.1 U	.005		.100 U			.0001 U	.001 U	.005
	5/05/94	DUP	.1 U	.005		.100 U					

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; RLS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate relative percent difference outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable limits; H - holding time exceeded.

5) Data Sources: X - field blank contamination; A - blind field standard results outside acceptable limits; Y - field blank contamination on the basis of a surface water field duplicate.

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TRACE METALS(1)									
STATION		SAMPLE DATE	SAMPLE TYPE(2)	DISSOLVED ALUMINUM	DISSOLVED ARSENIC	DISSOLVED ANTIMONY	DISSOLVED BARIUM	DISSOLVED BERYLLIUM	DISSOLVED CADMIUM
GFMW-06		8/16/94	N	.1 U	.003	.005 U	.100 U	.001 U	.0001 U
		10/12/94	N	.1 U	.002 JA	.005 U	.100 U	.001 U	.0001 UJA
		6/02/95	N	.1 U	.004	.005 U	.100 U	.001 U	
GFMW-07		8/30/89	N	.1 U	.012		.100 U		.0010 U
		9/26/89	N						.020 U
		3/28/90	N						.0010 U
		4/16/90	N	.1 U	.010				.020 U
		7/09/90	N	.1 U	.011 JF				.0010 U
		10/10/90	N	.1 U	.010				.020 U
		5/11/92	N	.1 U	.010				.0010 U
		6/14/93	N	.1 U		.005 U			.0003
GFMW-08		5/18/90	N	.1 U	.005 U				.0010 U
		7/10/90	N	.1 U	.005 UJF				.020 U
		10/11/90	N	.1 U	.005 U				.0010 U
		5/11/92	N						
GFMW-09		5/23/90	N	.1 U	.010				.0010 U
		7/10/90	N	.1 U	.013 JF				.020 U
		7/10/90	DUP	.1 U	.005 U				.0010 U
		10/11/90	N	.1 U	.012				.0001 U
		5/30/91	N	.1 U	.014				.0010 U
		9/17/91	N	.1 U	.014				.020 U
		5/11/92	N	.1 U	.015				.0006
		6/14/93	N	.1 U	.001 U				.0010 U
									.0001 U
									.001 U

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable range; P - reference lab split results outside acceptable limits; H - holding time exceeded.

outside acceptable limits: X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded. surface water field duplicate.

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TRACE METALS(1)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	DISSOLVED ALUMINUM	DISSOLVED ARSENIC	DISSOLVED ANTIMONY	DISSOLVED BARIUM	DISSOLVED BERYLLIUM	DISSOLVED CADMIUM	DISSOLVED CHROMIUM	DISSOLVED COPPER(5)	DISSOLVED IRON
			-----	-----	-----	-----	-----	-----	-----	-----	-----
GFMW-09	9/21/93	N	.1 U	.014	.005 U	.100 U	.001 U	.0001 U	.001 U	.001	.23
	9/21/93	DUP	.1 U	.014	.005 U	.100 U	.001 U	.0001 U	.001 U	.001	.23
	5/05/94	N	.1 U	.012	.005 U	.100 U	.001 U	.0002	.001 U	.001	.30
	8/16/94	N	.1 U	.014	.005 U	.100 U	.001 U	.0001 U	.001 U	.001	.15
	10/12/94	N	.1 U	.011 JA	.005 U	.100 U	.001 U	.0001 U	.001 U	.004 JF%	.32 JA
	6/02/95	N	.2 JA	.010	.005 U	.100 U	.001 U	.0001 UJA	.001 U	.001	.28
	6/02/95	D	.1 U	.010	.005 U	.100 U	.001 U	.0001 U	.001 U	.001	.25
GFMW-10	10/12/94	N	.1 U	.001 U	.005 U	.100 U	.001 U	.0001 U	.001 U	.001 UJF%	.03 U
	6/02/95	N	.1 JA	.001 U	.005 U	.100 U	.001 U	.0001 UJA	.001 U	.001 U	.05
MTHG-A	6/27/90	N	.1 U	.053		.100 U		.0010 U	.020 U	.010 U	.11
	7/12/90	N									
MTHG-B	6/27/90	N	.1 U	.011		.100 U		.0010 U	.020 U	.010	.03 U
	7/11/90	N									
BLANK	7/09/90	FB	.1 U	.005 U		.100 U		.0010 U	.020 U	.010 U	.03 U
	10/10/90	FB	.1 U	.005 U		.100 U		.0010 U	.020 U	.010 U	.03 U
	12/10/90	FB									
	3/18/91	FB									
	5/30/91	FB	.1 U	.005 U		.100 U		.0010 U	.020 U	.010 U	.03 U
	6/14/93	FB	.1 U	.001 U	.005 U	.100 U	.001 U	.0001 U	.001 U	.001 U	.03 U
	5/05/94	FB	.1 U	.001 U	.005 U	.100 U	.001 U	.0001 U	.001 U	.001 U	.03 U
	8/16/94	FB	.1 U	.001 U	.005 U	.100 U	.001 U	.0001 U	.001 U	.001 U	.03 U

NOTES: 1) All values are given in mg/l unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

5) Copper results from 10/94 flagged JF% are qualified on the basis of a surface water field duplicate.

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	DISSOLVED	DISSOLVED	DISSOLVED	DISSOLVED	DISSOLVED		
			ALUMINUM	ARSENIC	ANTIMONY	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM
CROSS-BLANK	10/12/94	CCB	.1 U	.001 U	.005 U	.100 U	.001 U	.0001 U	.001 U
	6/02/95	CCB	.1 U	.001 U	.005 U	.100 U	.001 U	.0001 U	.001 U
BLIND FIELD	6/15/90	BFS							
	10/12/94	BFS	.3	.069	.025	.200	.020	.0150	.097
	5/31/95	BFS	.8	.070	.100	.930	.036	.0280	.060

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; A - field blank contamination; X - field standard results outside acceptable limits; H - holding time exceeded.

5) Copper results from 10/94 flagged JF% are qualified on the basis of a surface water field duplicate.

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TRACE METALS(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	TRACE METALS(1)											
			DISSOLVED LEAD	DISSOLVED MANGANESE	DISSOLVED MERCURY	DISSOLVED MOLYBDENUM	DISSOLVED NICKEL	DISSOLVED SELENIUM	DISSOLVED SILVER	DISSOLVED THALLIUM	DISSOLVED ZINC	DISSOLVED ZINC		
GFMW-01	9/13/89	N	.010 U	.020 U	.0010 U	.006	.030 U	.005 U	.0050 U			.020		
	9/20/89	N	.010 U	.100	.0010 U	.013	.030 U	.005 U	.0050 U			.020		
	9/29/89	N												
	10/02/89	N	.010	.050	.0010 U	.024	.030 U	.005 U	.0050 U			.140		
	3/28/90	N												
	6/14/90	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U			.020		
	10/14/90	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U			.120		
	5/11/92	N												
GFMW-02	9/27/89	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U			.050		
	3/28/90	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U			.020		
	4/18/90	N	.010 U	.020 U	.0010 U	.005 UJP	.030 U	.005 U	.0050 U			.010 U		
	7/09/90	N												
	9/29/90	N												
	10/11/90	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U			.010 U		
	5/30/91	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U			.010		
	5/30/91	DUP	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U			.020		
	9/16/91	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U			.010		
	9/16/91	DUP	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U			.010		
	5/11/92	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U			.010 U		
	6/14/93	N	.002 U	.010	.0002 U	.005 U	.005 U	.001 U	.0005 U			.012 JX		
	9/21/93	N	.002 U	.010	.0002 U	.005 U	.005 U	.001 U	.0005 U			.007		
	5/05/94	N	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U			.005 U		
	8/16/94	N	.002 U	.020	.0002 U	.005 U	.005 U	.001 U	.0005 U			.007 JFX		
	10/12/94	N	.002 U	.030	.0002 UJA	.005 U	.005 U	.001 U	.0005 UJA			.005 U		
	6/01/95	N	.002 U	.040 JA	.0002 U	.007	.005 U	.001 U	.0005 U			.005 U		

NOTES:

- All values are given in mg/L unless otherwise noted.
- Sample Type: N - natural; DUP - field duplicate; BES - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.
- Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.
- Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable range; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	DISSOLVED LEAD	DISSOLVED MANGANESE	DISSOLVED MERCURY	DISSOLVED MOLYBDENUM	DISSOLVED NICKEL	DISSOLVED SELENIUM	DISSOLVED SILVER	DISSOLVED THALLIUM	DISSOLVED ZINC
GFMW-03	9/26/89 3/28/90	N N	.010 U .020 U		.0010 U .0005 U		.030 U .005 U		.0050 U .0050 U		.0050 U
	4/09/90	N	.010 U	.020 U	.0010 U	.0005 UJP	.030 U	.005 U	.0050 U	.0050 U	.0060
	7/09/90	N	.010 U	.020 U	.0010 U	.0005 U	.030 U	.005 U	.0050 U	.0050 U	.160
	10/10/90	N	.010 U	.020 U	.0010 U	.0005 U	.030 U	.005 U	.0050 U	.0050 U	.170
	10/10/90	DUP	.010 U	.020 U	.0010 U	.0005 U	.030 U	.005 U	.0050 U	.0050 U	.060
	5/30/91	N	.010 U	.020 U	.0010 U	.0005 U	.030 U	.005 U	.0050 U	.0050 U	
	5/11/92	N									
	6/14/93	N	.002 U	.010 U	.0002 U	.0005 U	.005 U	.001 U	.0005 U	.0005 U	.050
	9/21/93	N	.002 U	.010 U	.0002 U	.0005 U	.005 U	.001 U	.0005 U	.0005 U	.058
	5/05/94	N	.002 U	.010 U	.0002 U	.0005 U	.005 U	.001 U	.0005 U	.0005 U	.073
	8/16/94	N	.002 U	.010 U	.0002 U	.0005 U	.005 U	.001 U	.0005 U	.0005 U	.003 JFX
	8/16/94	DUP	.002 U	.010 U	.0002 U	.0005 U	.005 U	.001 U	.0005 U	.0005 U	.026
	10/11/94	N	.002 U	.010 JA	.0002 UJA	.0005 U	.005 U	.001 U	.0005 UJA	.0005 UJA	.005 JX
	6/01/95	N	.002 U	.030 JA	.0002 U	.0005 U	.005 U	.001 U	.0005 U	.0005 U	.120
GFMW-04	10/05/89 10/17/89	N N	.010 U .100		.0010 U .0005 U		.030 U .005 U		.0050 U .0050 U		.030
	3/28/90	N									
	4/18/90	N	.010	.120	.0010 U	.0005 U	.030 U	.005 U	.0050 U	.0050 U	.030
	7/10/90	N	.010 U	.090	.0010 U	.0005 UJP	.030 U	.005 U	.0050 U	.0050 U	.060
	10/11/90	N	.010 U	.100	.0010 U	.0005 U	.030 U	.005 U	.0050 U	.0050 U	.010 JX
	9/17/91	N	.002 U	.020 U	.0001 U	.0005 U	.030 U	.005 U	.0005 U	.0005 U	.010 U
	5/11/92	N									
	6/01/95	N	.002 U	.110 JA	.0002 U	.0005 U	.005 U	.001 U	.0005 U	.0005 U	.006

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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TRACE METALS(1)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	TRACE METALS(1)							
			DISSOLVED LEAD	DISSOLVED MANGANESE	DISSOLVED MERCURY	DISSOLVED MOLYBDENUM	DISSOLVED NICKEL	DISSOLVED SELENIUM	DISSOLVED SILVER	DISSOLVED THALLIUM
GFMW-05	10/17/89	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U	.040
	3/28/90	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U	.060
	4/16/90	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U	.030
	7/09/90	RLS	.010 U	.020 U	.0005 U	.050 U	.030 U	.005 U	.0050 U	.020 U
	7/09/90	N	.020 JX	.020 U	.0010 U	.160 JP	.030 U	.005 U	.0050 U	.030 JX
	10/10/90	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U	.040 JX
	5/30/91	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U	.040
	5/11/92	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U	.010 U
	6/14/93	N	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.010 JX
	9/21/93	N	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.013
	5/05/94	N	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.010 JX
	8/16/94	N	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.016 JFX
	10/11/94	N	.002 U	.010	.0002 UJA	.005 U	.005 U	.001 U	.0005 UJA	.006 JX
	6/01/95	N	.002 U	.020 JA	.0002 U	.005 U	.005 U	.001 U	.0005 U	.007
GFMW-06	10/05/89	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U	.150
	4/19/90	RLS								
	4/19/90	N	.010	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U	.100
	7/10/90	N	.010 U	.020 U	.0010 U	.005 UJP	.030 U	.005 U	.0050 U	.030 JX
	10/10/90	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U	.060
	5/30/91	N	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U	.070
	9/16/91	N	.002 U	.020 U	.0001 U	.005 U	.030 U	.005 U	.0005 U	.030
	9/21/93	N	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.060
	5/05/94	N	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.021 JX
	5/05/94	DUP	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.021

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable range; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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TRACE METALS(1)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	TRACE METALS(1)								
			DISSOLVED LEAD	DISSOLVED MANGANESE	DISSOLVED MERCURY	DISSOLVED MOLYBDENUM	DISSOLVED NICKEL	DISSOLVED SELENTUM	DISSOLVED SILVER	DISSOLVED THALLIUM	DISSOLVED ZINC
GFMW-06	8/16/94	N	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.034 JF
	10/12/94	N	.002 U	.020	.0002 UJA	.005 U	.005 U	.001 U	.0005 UJA	.002 URA	.005 U
	6/02/95	N -	.002 U	.040 JA	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.016
GFMW-07	8/30/89	N	.010 U	.020 U	.0010 U	.005 U	.005 U	.003 U	.005 U	.0050 U	.070
	9/26/89	N									
	3/28/90	N									
	4/16/90	N	.010 U	.020 U	.0010 U	.005 U	.005 U	.030 U	.005 U	.0050 U	.080
	7/09/90	N	.010 U	.290	.0010 U	.005 UJP	.005 UJP	.030 U	.005 U	.0050 U	.070
	10/10/90	N	.010 U	.480	.0010 U	.005 U	.005 U	.030 U	.005 U	.0050 U	.150
	5/11/92	N	.010 U	.570	.0010 U	.005 U	.005 U	.030 U	.005 U	.0050 U	.040
	6/14/93	N	.002 U	.120	.0002 U	.005 U	.005 U	.005 U	.001 U	.0005 U	.090
	5/18/90	N	.010 U	.190	.0010 U	.001 U	.001 U	.030 U	.005 U	.0050 U	.040
	7/10/90	N	.010 U	.020 U	.0010 U	.007 JPX	.007 JPX	.030 U	.005 U	.0050 U	.030 JX
	10/11/90	N	.010 U	.020 U	.0010 U	.005 U	.005 U	.030 U	.005 U	.0050 U	.010 JX
	5/11/92	N									
	5/23/90	N	.010 U	.610	.0010 U	.005	.005	.030 U	.005 U	.0050 U	.020
	7/10/90	N	.010 U	.490	.0010 U	.005 UJP	.005 UJP	.030 U	.005 U	.0050 U	.020 JX
	7/10/90	DUP	.010 U	.490	.0010 U	.005 U	.005 U	.030 U	.005 U	.0050 U	.020
	10/11/90	N	.002 U	.460	.0001 U	.005 U	.005 U	.030 U	.005 U	.005 U	.010 JX
	5/30/91	N	.010 U	.630	.0010 U	.005 U	.005 U	.030 U	.005 U	.0050 U	.020
	9/17/91	N	.002 U	.550	.0001 U	.005 U	.005 U	.030 U	.005 U	.005 U	.020
	5/11/92	N	.010 U	.600	.0010 U	.005 U	.005 U	.030 U	.005 U	.0050 U	.010 U
	6/14/93	N	.002 U	.510	.0002 U	.005 U	.005 U	.005 U	.001 U	.0005 U	.010 JX

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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TRACE METALS(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	DISSOLVED LEAD	DISSOLVED MANGANESE	DISSOLVED MERCURY	DISSOLVED MOLYBDENUM	DISSOLVED NICKEL	Dissolved Selenium	Dissolved Silver	Dissolved Thallium	Dissolved Zinc
GFMW-09	9/21/93	N	.002 U	.490	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.012
	9/21/93	DUP	.002 U	.490	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.011
5/05/94	N	.002 U	.610	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.007 JX	
8/16/94	N	.002 U	.450	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.010 JFX	
10/12/94	N	.002 U	.500	.0002 UJA	.005 U	.005 U	.001 U	.0005 UJA	.002 URA	.005 U	
6/02/95	N	.002 U	.460 JA	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.005 U	
6/02/95	D	.002 U	.420	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.005 U	
GFMW-10	10/12/94	N	.002 U	.020	.0002 UJA	.005 U	.005 U	.001 U	.0005 UJA	.002 URA	.016 JX
	6/02/95	N	.002 U	.190 JA	.0002 U	.012	.005 U	.001 U	.0005 U	.002 U	.005 U
MTHG-A	6/27/90	N	.010 U	.070	.0010 U	.075	.030 U	.005 U	.0050 U		.100
	7/12/90	N									
MTHG-B	6/27/90	N	.010 U	.380	.0010 U	.005 U	.030 U	.005 U	.0050 U		.040
	7/11/90	N									
BLANK	7/09/90	FB	.020	.020 U	.0010 U	.005	.030 U	.005 U	.0050 U		.010
	10/10/90	FB	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U		.010
	12/10/90	FB									
	3/18/91	FB									
	5/30/91	FB	.010 U	.020 U	.0010 U	.005 U	.030 U	.005 U	.0050 U		.010 U
	6/14/93	FB	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.008
	5/05/94	FB	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.009
	8/16/94	FB	.002 U	.010 U	.0002 U	.005 U	.005 U	.001 U	.0005 U	.002 U	.006

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); % - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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TRACE METALS(1)

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STATION	SAMPLE DATE	SAMPLE TYPE(2)	DISSOLVED	DISSOLVED	DISSOLVED	DISSOLVED	DISSOLVED
			MERCURY	MANGANESE	MOLYBDENUM	NICKEL	SELENIUM
CROSS-BLANK	10/12/94	CCB	.002 U	.010 U	.0002 U	.005 U	.001 U
	6/02/95	CCB	.002 U	.010 U	.0002 U	.005 U	.001 U
BLIND FIELD	6/15/90	BFS					
	10/12/94	BFS	.013	.050	.0010	.005 U	.095
	5/31/95	BFS	.080	.220	.0068	.005 U	.080

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

4) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

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SOLIDS, ALKALINITY AND NUTRIENTS(1)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	TOTAL		TOTAL		TOTAL		TOTAL	
			DISSOLVED SOLIDS	CARBONATE AS CO ₃	BICARBONATE AS HC ₀₃	HARDNESS AS CaCO ₃ (3)	ALKALINITY AS CaCO ₃ (3)	AMMONIA	NITRATE + NITRITE AS N	KJELDAHL NITROGEN(6)
GFMW-01	9/13/89	N								
	9/20/89	N								
	9/29/89	N								
	10/02/89	N	868	188	158	158.0	443	2.70	.05 U	18.30
	3/28/90	N								
	6/14/90	N	184	6	119	141.0	108	.10	.05 URA	.10
	10/14/90	N	175	0	136	139.0	111	.10	.05 U	.30
	5/11/92	N								
GFMW-02	9/27/89	N	179	0	200	179.0	164	.10 U	.17	.30
	3/28/90	N	197	0	205	192.0	168	.10 U	.21	.10 U
	4/18/90	N	200	0	204	175.0	167	.10 U	.20	.10 U
	7/09/90	N	185	0	199	186.0	163	.10 U	.20	.30 JX
	9/29/90	N								
	10/11/90	N	199	0	199	189.0	163	.10 U	.20	.10
	5/30/91	N	193	0	184	168.0	151	.10 U	.18	.10 U
	5/30/91	DUP	183	0	182	168.0	149	.10 U	.18	.10 U
	9/16/91	N	176	0	193	182.0	158	.10 U	.19	.10 U
	9/16/91	DUP	169	0	190	182.0	156	.10 U	.19	.10 U
	5/11/92	N	149	0	191	179.0	156	.10 U	.14	.40
	6/14/93	N	171	0	172	159.0	141	.10 U	.16	.10 U
	9/21/93	N	205	0	207	183.0	170	.10 U	.19	.10 U
	5/05/94	N	204	0	208	195.0	170	.05 U	.23	.10 U
	8/16/94	N	201	0	208	187.0	170	.05 U	.20	.10 U
	10/12/94	N	215	0	203	186.0	166	.05 U	.28 JX	.20 UJF
										.04 JHX

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Calculated from: Hardness = $[Ca]^*2.497 + [Mg]^*4.118$.

4) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

5) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

6) Total phosphorous and total kjeldahl nitrogen results for 10/94 flagged JF or JF% are qualified on the basis of a surface water field duplicate.

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SOLIDS, ALKALINITY AND NUTRIENTS(1)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	TOTAL DISSOLVED SOLIDS		BICARBONATE AS CO ₃	TOTAL HARDNESS AS CaCO ₃	ALKALINITY AS CaCO ₃ (3)	AMMONIA	NITRATE + NITRITE AS N		TOTAL KJELDAHL NITROGEN(6)	ORTHOPHOSPHATE	TOTAL PHOSPHOROUS(6)	
			TOTAL	DISSOLVED					.05 U	.17	.20 U			
GFMW-02	6/01/95	N	199 JF%	0	184	161.0	151	.05 U	.17	.20	.01	.02		
GFMW-03	9/26/89	N	174	0	191	164.0	157	.10 U	.12	.20	.01	.02		
	3/28/90	N	178	0	192	171.0	157	.10 U	.14	.20	.01 UJP	.01 JP		
	4/09/90	N	187	0	185	170.0	151	.10 U	.15	.20 JX	.01 UJP	.02 JF%X		
	7/09/90	N	176	0	188	172.0	154	.10 U	.14	.10 U	.01 U	.01 U		
	10/10/90	N	DUP	169	0	189	174.0	155	.10 U	.12	.10 U	.01 U	.01 U	
	10/10/90	DUP	181	0	184	166.0	150	.10 U	.16	.10 U	.01	.02		
	5/30/91	N	174	0	186	159.0	152	.10 U	.13	.10 U	.08	.17		
	5/11/92	N	180	0	191	163.0	156	.10 U	.14	.10 U	.09	.10		
	6/14/93	N	174	0	196	172.0	161	.05 U	.15	.10 U	.04 JX	.04 JX		
	9/21/93	N	180	0	196	165.0	179	.05 U	.12	.10 U	.04	.15		
	5/05/94	N	180	0	218	165.0	160	.05 U	.14	.10 U	.04	.15		
	8/16/94	N	181	0	195	165.0	162.0	.05 U	.17 JX	.20 UJF	.02 JHX	.02 JF%X		
	8/16/94	DUP	168	0	173	162.0	142	.05 U	.14	.20 U	.01	.02 JF%		
	10/11/94	N	185 JH	0	173	168.0	142	.05 U	.14	.20 U	.01	.02 JF%		
	6/01/95	N	188 JF%	0										
GFMW-04	10/05/89	N	186	0	143	129.0	117	.10 U	.05 U	.05 U	.01 U	.01 U		
	10/17/89	N	170	0	137	127.0	112	.10 U	.05 U	.10 U	.01 U	.02		
	3/28/90	N	196	0	141	125.0	115	.10 U	.05 U	.10 U	.01 UJP	.01 JP		
	4/18/90	N	164	0	127	117.0	104	.10 U	.05 U	.10 JX	.01 U	.02 JF%X		
	7/10/90	N	152	0	133	120.0	109	.10 U	.05 U	.10 U	.01 U	.01 U		
	10/11/90	N	140	0	125	117.0	102	.10 U	.05 U	.10 U	.01	.04 JF%		
	9/17/91	N												

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Calculated from: Hardness = $[Ca]^2 \cdot 497 + [Mg] \cdot 4.118$.

4) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

5) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

6) Total phosphorous and total kjeldahl nitrogen results for 10/94 flagged JF or JF% are qualified on the basis of a surface water field duplicates.

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SOLIDS, ALKALINITY AND NUTRIENTS(1)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	TOTAL DISSOLVED SOLIDS		CARBONATE AS CO ₃	BICARBONATE AS HC ₀₃	TOTAL HARDNESS AS CaCO ₃ (3)	ALKALINITY AS CaCO ₃	NITRATE + NITRITE AS N		TOTAL KJELDAHL NITROGEN(6)	ORTHO-PHOSPHATE	TOTAL PHOSPHOROUS(6)	
			TOTAL	DISSOLVED SOLIDS					AMMONIA	NITRATE AS N				
GFMW-04	5/11/92	N	187	JF%	0	121	110.0	99	.11	.05 U	.26	.01	.04 JF	
GFMW-05	10/17/89	N	219	0	161	171.0	132	.10 U	.36	.10 U	.01 U	.01 U		
	3/28/90	N	189	0	163	160.0	134	.10 U	.18	.10 U	.01 U	.02		
	4/16/90	N	208	0	167	152.0	137	.10 U	.20	.10 U	.01 UJP	.01 JP		
	7/09/90	RLS	168	0	142	135.0	116	.05 U	.20	.20 U	.02 U	.02 U		
	7/09/90	N	185	0	150	146.0	123	.10 U	.24	.10 JX	.01 U	.01 JF% X		
	10/10/90	N	183	0	168	177.0	138	.10 U	.27	.10 U	.01 U	.01 U		
	5/30/91	N	166	0	129	140.0	105	.10 U	.34	.10 U	.01 U	.01 U		
	5/11/92	N	169	0	167	167.0	137	.10 U	.23	.40	.14	.22		
	6/14/93	N	174	0	157	160.0	129	.10 U	.41	.10 U	.10	.17		
	9/21/93	N	213	0	161	165.0	132	.10 U	.32	.10 U	.10	.11		
	5/05/94	N	200	0	167	171.0	137	.05 U	.40	.10 U	.05	.06		
	8/16/94	N	215	0	172	172.0	141	.05 U	.31	.10 U	.06	.19		
	10/11/94	N	219	JH	0	165	168.0	135	.05 U	.37 JX	.20 UJF	.03 JHX	.01 JF% X	
	6/01/95	N	233	JF%	0	155	178.0	127	.05	.49	.20 U	.01 U	.02 JF	
GFMW-06	10/05/89	N	48	0	245	236.0	201	.10 U	.53	.10 U	.01 U	.01		
	4/19/90	RLS	294	0	223	218.0	183	.05 U	.65	.20 U	.07	.20		
	4/19/90	N	300	0	251	231.0	206	.10 U	.60	.10 U	.01 UJP	.01 JP		
	7/10/90	N	252	0	227	209.0	186	.10 U	.64	.10 JX	.01 U	.01 JF% X		
	10/10/90	N	261	0	243	226.0	199	.10 U	.62	.20	.01 U	.01 U		
	5/30/91	N	258	0	234	202.0	191	.10 U	.59	.10 U	.01 U	.01 U		
	9/16/91	N	239	0	240	224.0	197	.10 U	.60	.10 U	.06	.12 JF%		

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Calculated from: Hardness = [Ca]*2.497 + [Mg]*4.118.

4) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

5) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

6) Total phosphorous and total kjeldahl nitrogen results for 10/94 flagged JF or JF% are qualified on the basis of a surface water field duplicate.

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3/19/96

SOLIDS, ALKALINITY AND NUTRIENTS(1)

Page 4

STATION	SAMPLE DATE	SAMPLE TYPE(2)	TOTAL DISSOLVED SOLIDS			TOTAL CARBONATE AS CO ₃			TOTAL HARDNESS AS CaCO ₃ (3)			ALKALINITY AS CaCO ₃			AMMONIA			NITRATE + NITRITE AS N			TOTAL KJELDAHL NITROGEN(6)			ORTHO-PHOSPHATE			TOTAL PHOSPHOROUS(6)		
			TOTAL	DISSOLVED	SOLIDS	CARBONATE	BICARBONATE	AS HC0 ₃	TOTAL	ALKALINITY	AS CaCO ₃	HARDNESS	AS CaCO ₃ (3)	AMMONIA	NITRATE + NITRITE AS N	KJELDAHL NITROGEN(6)	ORTHO-PHOSPHATE	TOTAL PHOSPHOROUS(6)											
GFMW-06	9/21/93	N	267	0		233	206.0		191	.10 U		.57		.10 U	.05		.06												
	5/05/94	N	264	0		248	221.0		203	.05 U		.51		.10 U	.04	JX	.04	JX											
	5/05/94	DUP	259	0		249	220.0		204	.05 U		.49		.10 U	.03		.04												
	8/16/94	N	260	0		236	214.0		194	.05 U		.46		.10 U	.04		.09												
	10/12/94	N	258	0		232	206.0		190	.05 U		.58		.20 UJF	.03 JHX	.02 JFX%													
	6/02/95	N	279	JF%	0	218	225.0		179	.05		.56		.20 U	.01	.02 JF													
GFMW-07	8/30/89	N	245	0		202	205.0		165	.10 U		.06		.20		.01 U	.01 U												
	9/26/89	N	221	0		206	201.0		168	.10 U		.35		.10		.02	.02												
	3/28/90	N	234	0		238	227.0		195	.10 U		.21		.10		.01 UJP	.01 UJP												
	4/16/90	N	243	0		208	201.0		171	.10		.39		.10		.01 U	.02 JFX%												
	7/09/90	N	243	0		236	222.0		193	.10 U		.19		.10		.01 U	.01 U												
	10/10/90	N	237	0		256	239.0		209	.10 U		.11		.10		.01 U	.01 U												
	5/11/92	N	211	0		261	237.0		214	.10 U		.05 U		.20		.09	.16												
	6/14/93	N	227	0		228	204.0		187	.10 U		.15		.10		.06	.18												
GFMW-08	5/18/90	N	124	0		131	120.0		107	.10 U		.05 U		.20		.01 U	.02												
	7/10/90	N	126	0		123	115.0		101	.10 U		.05 U		.10		.01 U	.02 JFX%												
	10/11/90	N	145	0		124	114.0		102	.10 U		.05 U		.10		.01 U	.01 U												
	5/11/92	N																											
GFMW-09	5/23/90	N	127	0					99.0		87		.10 U		.05 U		.10 U												
	7/10/90	N	118	0					90		87.0		.74		.10 U		.05 U												
	7/10/90	DUP	111	0					95		88.0		.78		.10 U		.05 U												
	10/11/90	N	101	0		108			87.0		89		.10 U		.05 U		.10 U												

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Calculated from: Hardness = [Ca]*2.497 + [Mg]*4.118.

4) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

5) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

6) Total phosphorous and total kjeldahl nitrogen results for 10/94 flagged JF or JF% are qualified on the basis of a surface water field duplicate.

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SOLIDS, ALKALINITY AND NUTRIENTS(1)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	TOTAL DISSOLVED SOLIDS	CARBONATE AS CO ₃	BICARBONATE AS HC ₀₃	TOTAL HARDNESS AS CaCO ₃ (3)	ALKALINITY AS CaCO ₃	AMMONIA	NITRATE + NITRITE AS N	KJELDAHL NITROGEN(6)	ORTHO-PHOSPHATE	TOTAL PHOSPHOROUS(6)
GFMW-09	5/30/91	N	132	0	100	95.0	82	.10 U	.05 U	.10 U	.05	.08
	9/17/91	N	102	0	103	91.0	84	.10 U	.05 U	.10 U	.19	.19 JF%
	5/11/92	N	107	0	122	93.0	100	.10 U	.05 U	.20	.15	.33
	6/14/93	N	120	0	96	80.0	79	.10 U	.05 U	.10 U	.10	.21
	9/21/93	N	123	0	101	86.0	83	.10 U	.05 U	.10 U	.11	.12
	9/21/93	DUP	123	0	102	88.0	83	.10 U	.05 U	.10 U	.12	.14
	5/05/94	N	121	0	107	99.0	88	.05 U	.03	.10 U	.11	.11
	8/16/94	N	103	0	100	82.0	82	.05 U	.02	.10 U	.04	.20
	10/12/94	N	121	0	99	85.0	81	.05 U	.05 U	.20 UJF	.09 JH	.07 JF%
	6/02/95	N	125 JF%	0	93	87.0	76	.05 U	.05 U	.20 U	.02	.05 JF
	6/02/95	D	243	0	87	81.0	71	.05 U	.05 U	.20 U	.02	.03
GFMW-10	10/12/94	N	196	0	150	116.0	123	.52	.54 JX	.44 JF	.07 JH	.10 JF%
	6/02/95	N	159 JF%	0	178	142.0	146	.09	.09	.25	.01	.23 JF
MTHG-A	6/27/90	N	533	0	196	431.0	160	.10 U	1.13 RA	.20	.01 U	.04
	7/12/90	N										
MTHG-B	6/27/90	N	481	0	310	418.0	254	.10 U	9.35 RA	.20	.01 U	.02
	7/11/90	N										
BLANK	7/09/90	FB	1 U	0	2	1.0 U	2	.10 U	.05 U	.10	.01 U	.02
	10/10/90	FB	3	0	4	1.0 U	3	.10 U	.05 U	.10 U	.01 U	.01 U
	12/10/90	FB	1	0	1	1.0 U	1	.10 U	.05 U	.20	.01 U	.01 U
	3/18/91	FB	1	0	2	1.0 U	1	.10 U	.05 U	.10 U	.01 U	.02

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Calculated from: Hardness = [Ca]*2.497 + [Mg]*4.118.

4) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

5) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

6) Total phosphorous and total kjeldahl nitrogen results for 10/94 flagged JF or JF% are qualified on the basis of a surface water field duplicate.

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SOLIDS, ALKALINITY AND NUTRIENTS(1)

STATION	SAMPLE DATE	SAMPLE TYPE(2)	TOTAL DISSOLVED SOLIDS		CARBONATE AS CO ₃	BICARBONATE AS HC ₀₃	TOTAL HARDNESS AS CaCO ₃ (3)		ALKALINITY AS CaCO ₃	AMMONIA	NITRATE + NITRITE AS N		TOTAL KJELDAHL NITROGEN(6)	ORTHOPHOSPHATE	TOTAL PHOSPHOROUS(6)			
			TOTAL	DISSOLVED			AS HC ₀₃	AS CaCO ₃ (3)			NITRATE + NITRITE AS N							
BLANK	5/30/91	FB	4	0	2	2	1.0	U	2	.10	U	.05	U	.10	U	.01	U	
	6/14/93	FB	1	U	0	2	1.0	U	2	.10	U	.05	U	.10	U	.01	U	
	5/05/94	FB	1	U	0	2	1.0	U	2	.05	U	.01	U	.10	U	.01	U	
	8/16/94	FB	1	U	0	1	1.0	U	1	.05	U	.01	U	.10	U	.01	U	
CROSS-BLANK	10/12/94	CCB	20	U	0	1	U	7.0	U	1	U	.05	U	.11	.20	U	.01	JH
	6/02/95	CCB															.01	
BLIND FIELD	6/15/90	BFS	971	63	0	0	1.0	U	157	9.30		2.89	9.30		.01	U	2.76	
	10/12/94	BFS	910	0	237				194			8.40						
	5/31/95	BFS		0	121				99			11.40						

NOTES: 1) All values are given in mg/L unless otherwise noted.

2) Sample Type: N - natural; DUP - field duplicate; BFS - blind field standard; CCB - cross-contamination blank; FB - field blank; RLS - reference lab split.

3) Calculated from: Hardness = [Ca]^{2.497} + [Mg]^{1.118}.

4) Data Qualifiers: U - value less than specified detection limit; J - value considered estimated; R - value rejected.

5) Data Descriptors: F - field duplicate results outside acceptable range (PQL-based); F% - field duplicate relative percent difference outside acceptable range; P - reference lab split results outside acceptable range (PQL-based); P% - reference lab split relative percent difference outside acceptable limits; X - field blank contamination; A - blind field standard results outside acceptable limits; H - holding time exceeded.

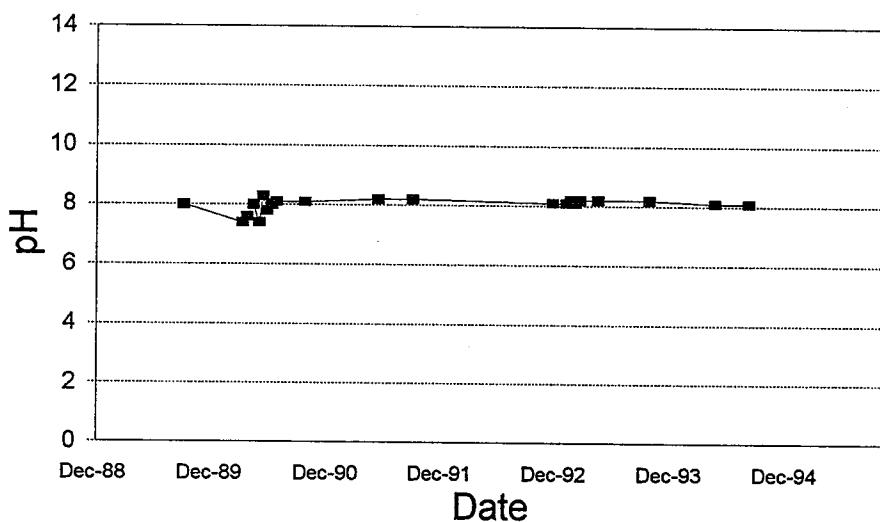
6) Total phosphorous and total kjeldahl nitrogen results for 10/94 flagged JF or JF% are qualified on the basis of a surface water field duplicate.

APPENDIX C

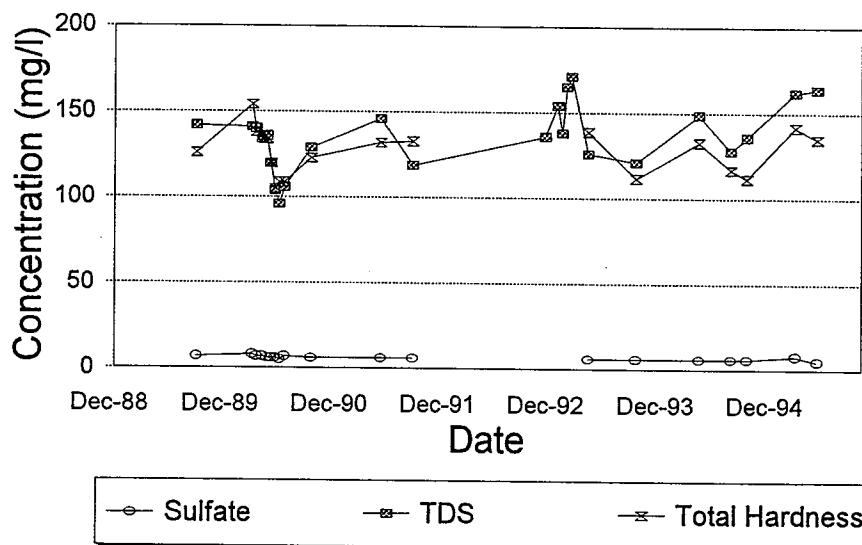
GRAPHS OF SURFACE WATER DATA WATER RESOURCES MONITORING PROGRAM

GFSW-1

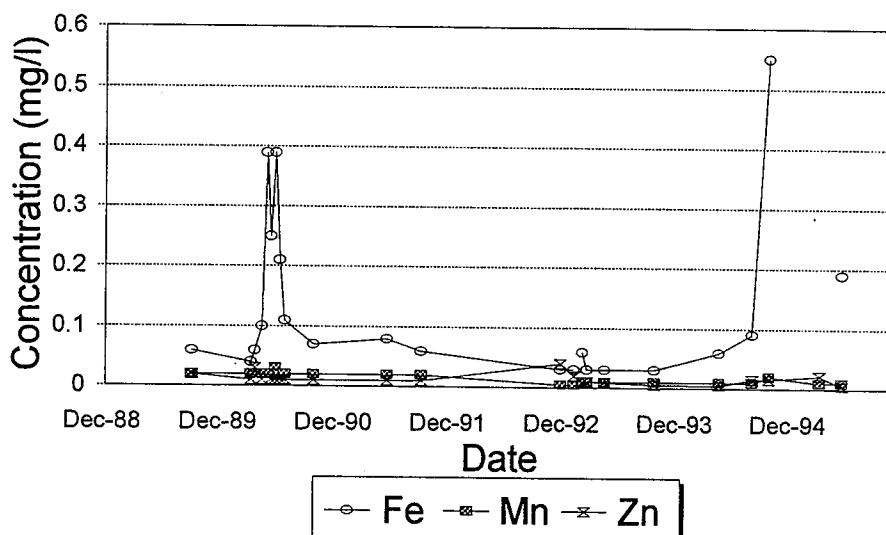
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GFSW-1

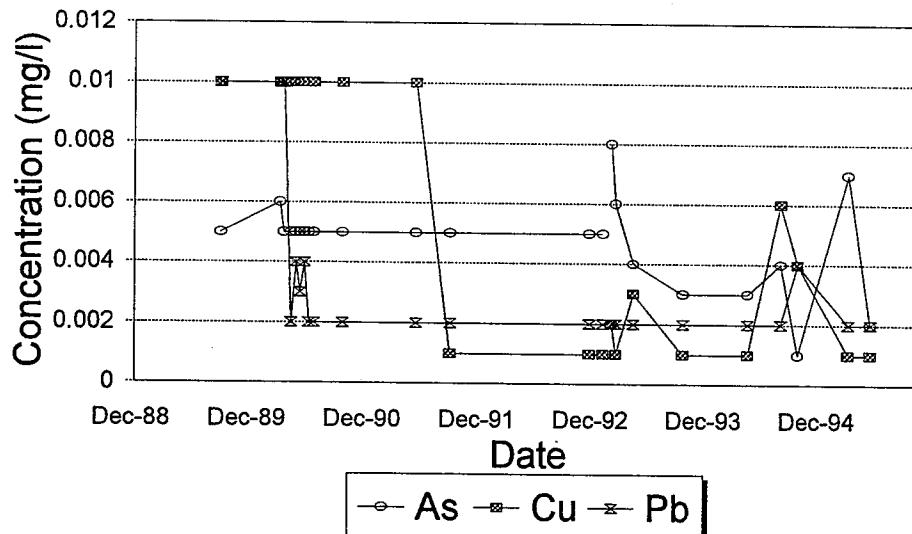


GFSW-1



Detection limits: Fe = 0.03 mg/l (9/89 - 6/95)
Mn = 0.02 mg/l (9/89 - 5/92); 0.01 mg/l (6/93 - 6/95)
Zn = 0.01 mg/l (9/89 - 5/92); 0.005 mg/l (6/93 - 6/95)

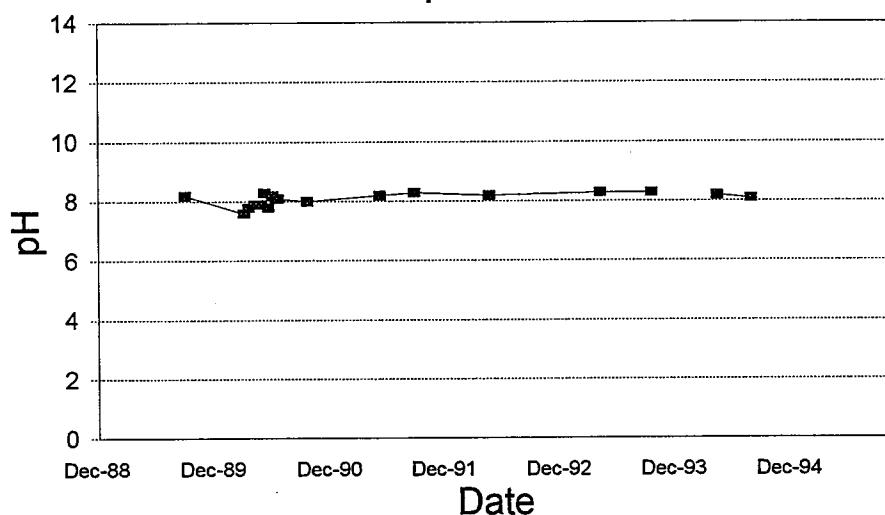
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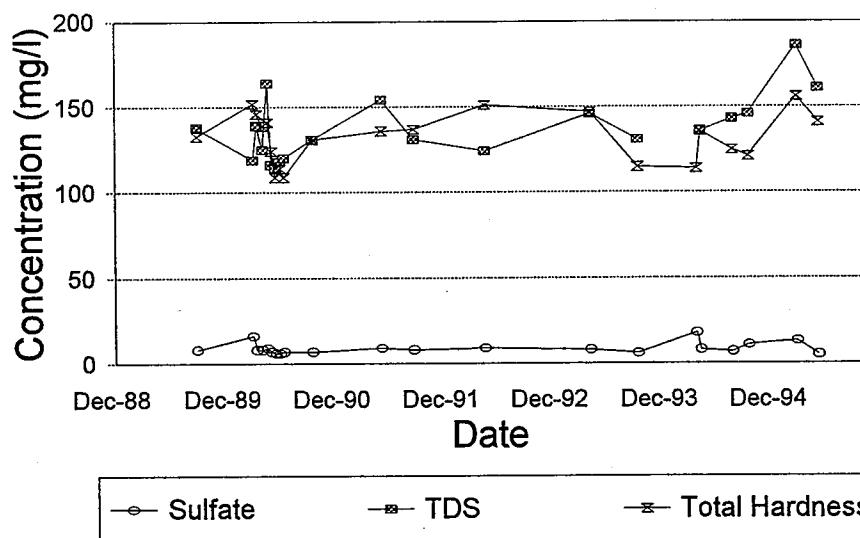
Detection limits: As = 0.005 mg/l (9/89 - 3/93); 0.001 mg/l (3/93 - 6/95)
Cu = 0.01 mg/l (9/89 - 5/91); 0.001 mg/l (9/91 - 6/95)
Pb = 0.01 mg/l (9/89 - 4/90); 0.002 mg/l (4/90 - 6/95)

GFSW-2

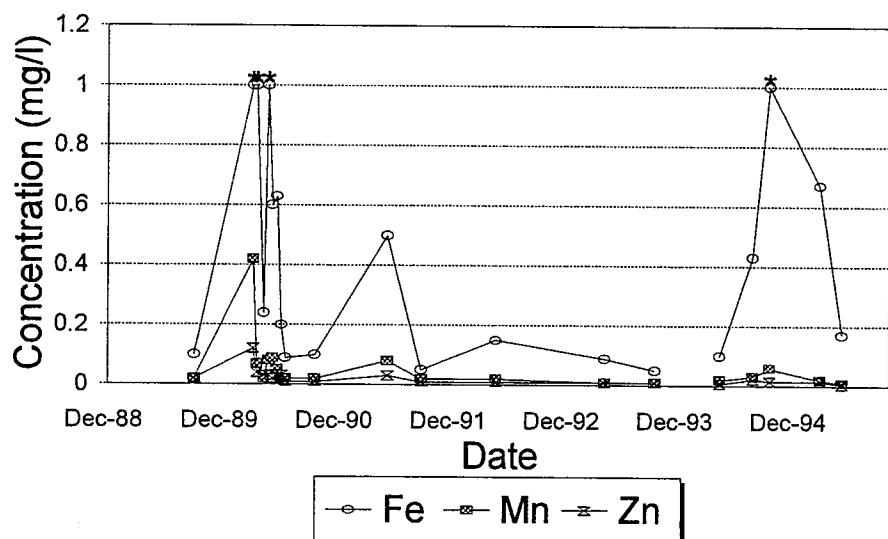
pH



GFSW-2

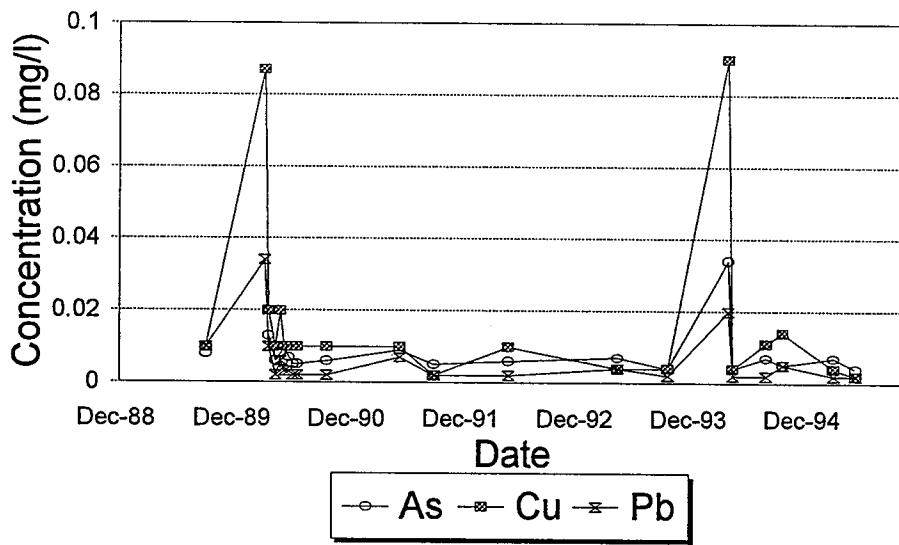


GFSW-2



Detection limits: Fe = 0.03 mg/l (9/89 - 6/95)
Mn = 0.02 mg/l (9/89 - 5/92); 0.01 mg/l (6/93 - 6/95)
Zn = 0.01 mg/l (9/89 - 5/92); 0.005 mg/l (6/93 - 6/95)
* denotes concentration greater than 1 mg/l

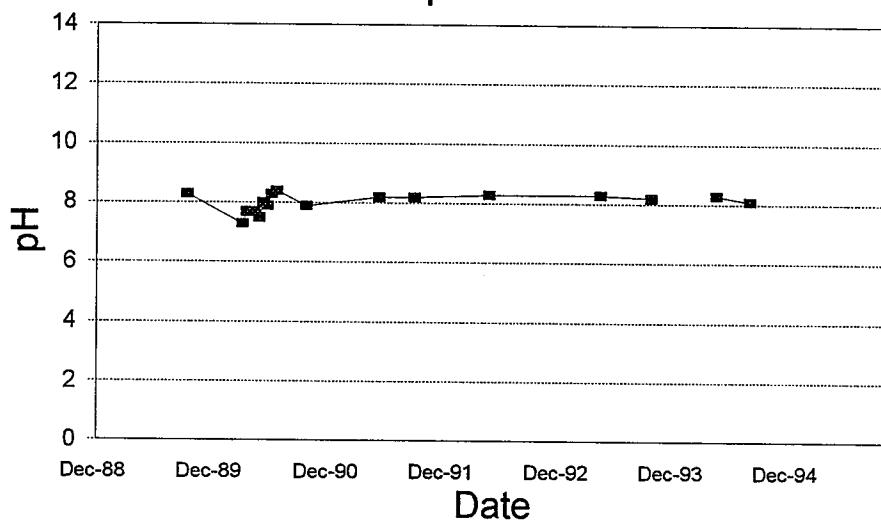
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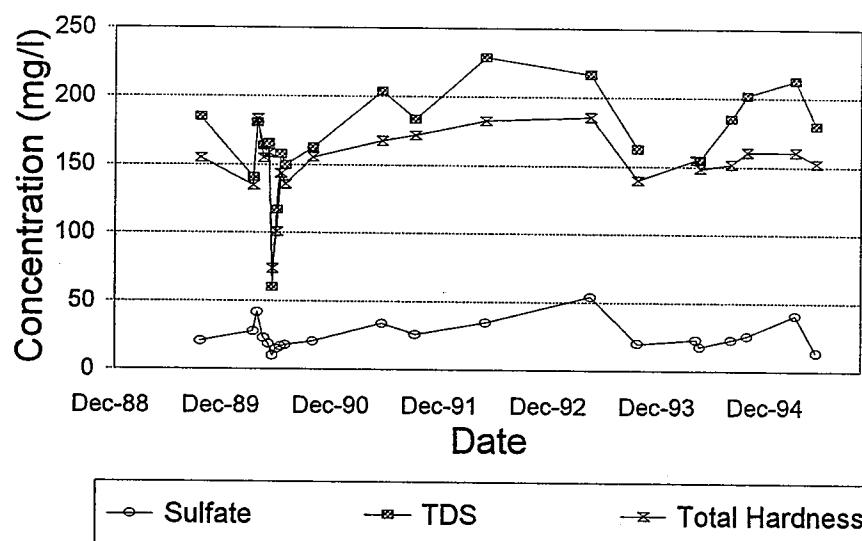
Detection limits: As = 0.005 mg/l (9/89 - 3/93); 0.001 mg/l (3/93 - 6/95)
Cu = 0.01 mg/l (9/89 - 5/91); 0.001 mg/l (9/91 - 6/95)
Pb = 0.01 mg/l (9/89 - 4/90); 0.002 mg/l (4/90 - 6/95)

GFSW-5

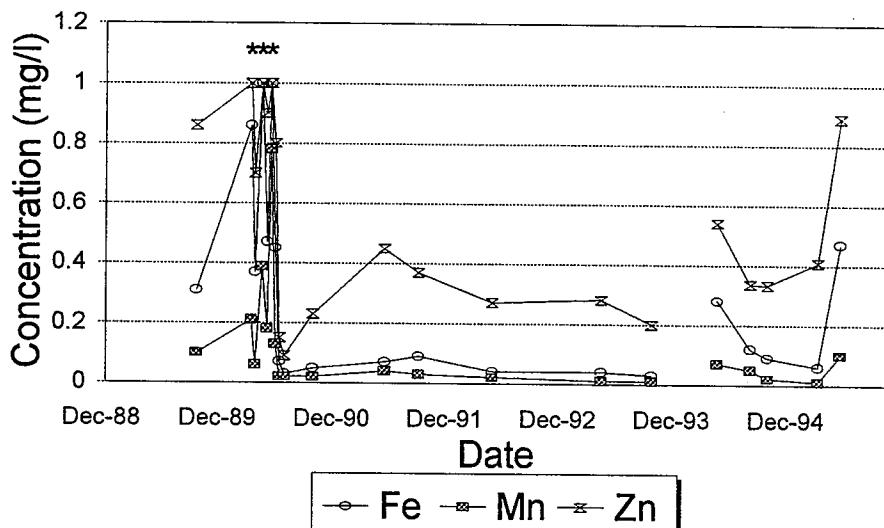
pH



GFSW-5

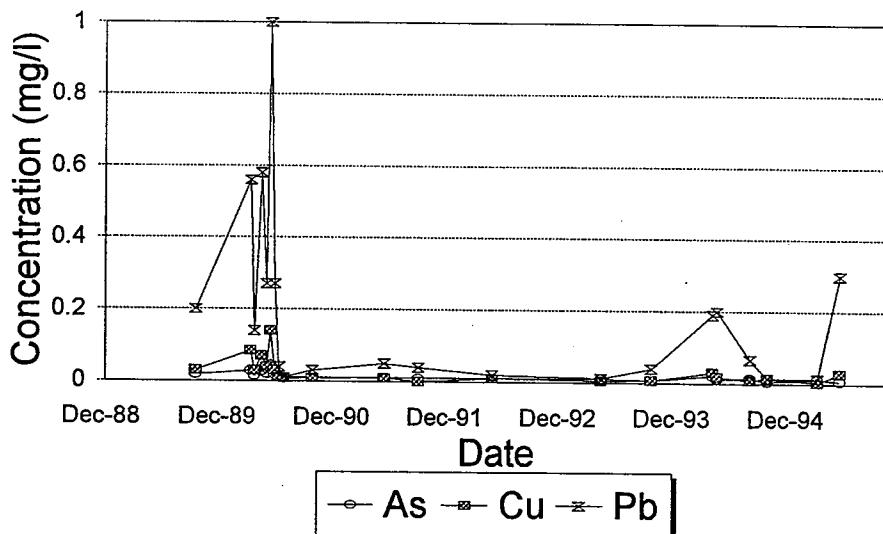


GFSW-5



Detection limits: Fe = 0.03 mg/l (9/89 - 6/95)
Mn = 0.02 mg/l (9/89 - 5/92); 0.01 mg/l (6/93 - 6/95)
Zn = 0.01 mg/l (9/89 - 5/92); 0.005 mg/l (6/93 - 6/95)
* denotes concentrations greater than 1 mg/l

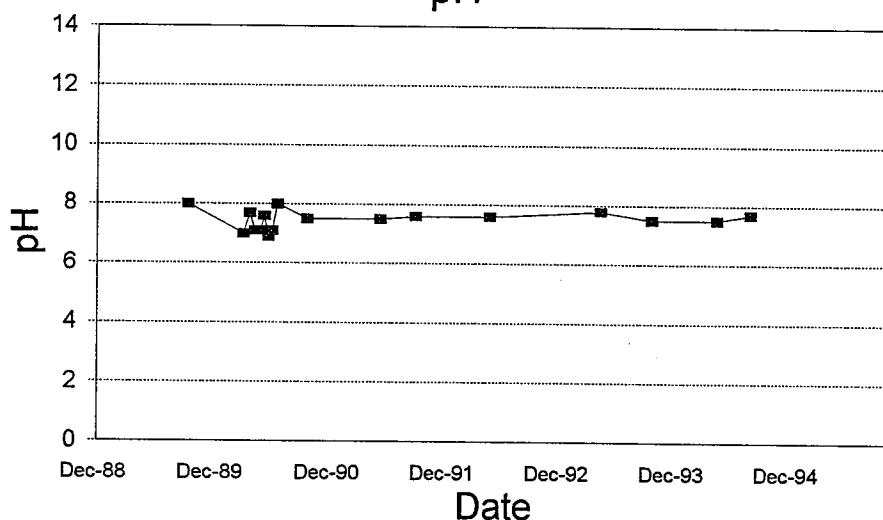
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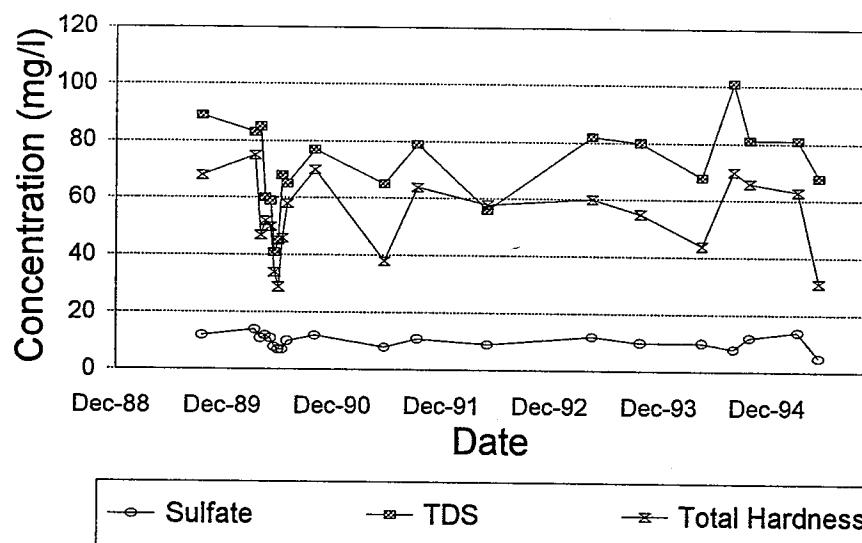
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Cu = 0.01 mg/l (9/89 - 5/91); 0.001 mg/l (9/91 - 6/95)
Pb = 0.01 mg/l (9/89 - 4/90); 0.002 mg/l (4/90 - 6/95)

GFSW-6

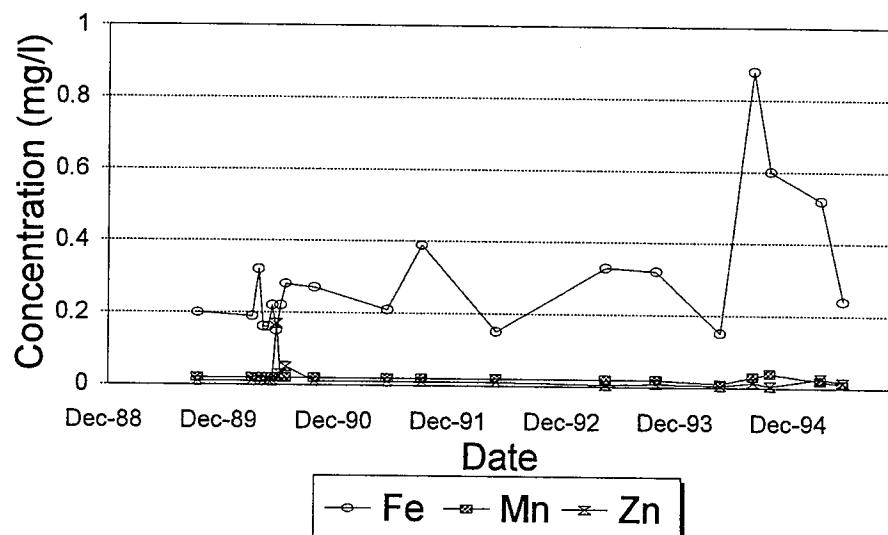
pH



GFSW-6

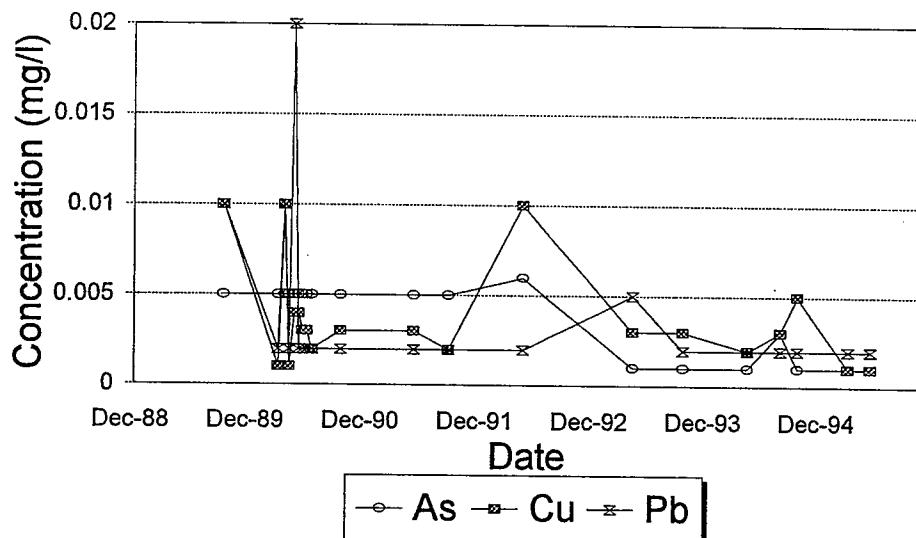


GFSW-6



Detection limits: Fe = 0.03 mg/l (9/89 - 6/95)
Mn = 0.02 mg/l (9/89 - 5/92); 0.01 mg/l (6/93 - 6/95)
Zn = 0.01 mg/l (9/89 - 5/92); 0.005 mg/l (6/93 - 6/95)

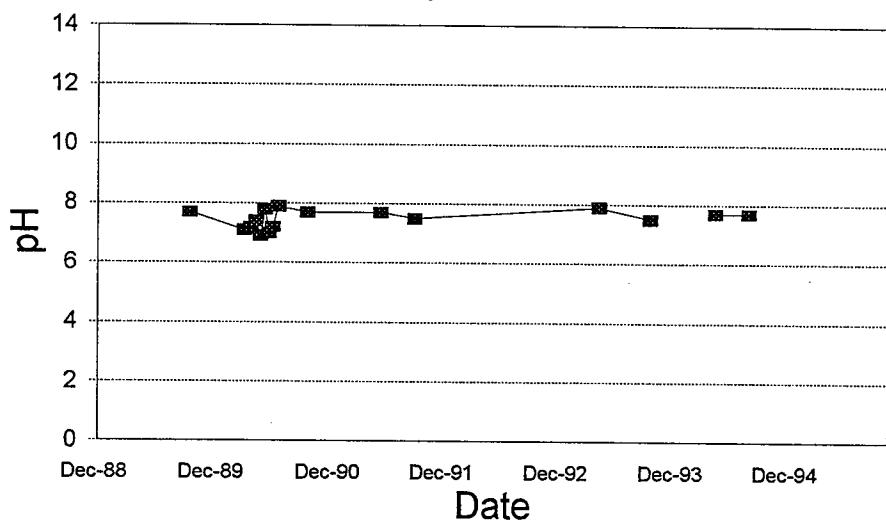
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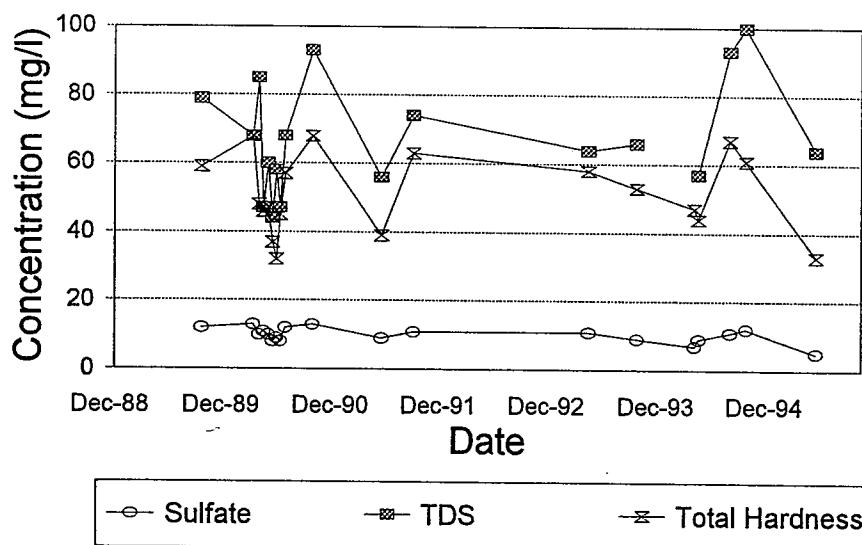
Detection limits: As = 0.005 mg/l (9/89 - 3/93); 0.001 mg/l (3/93 - 6/95)
Cu = 0.01 mg/l (9/89 - 5/91); 0.001 mg/l (9/91 - 6/95)
Pb = 0.01 mg/l (9/89 - 4/90); 0.002 mg/l (4/90 - 6/95)

GFSW-7

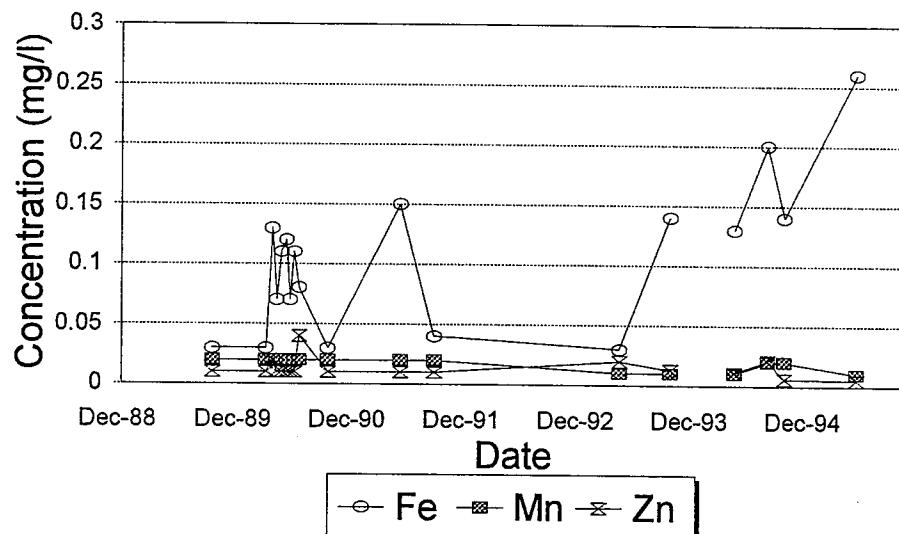
pH



GFSW-7

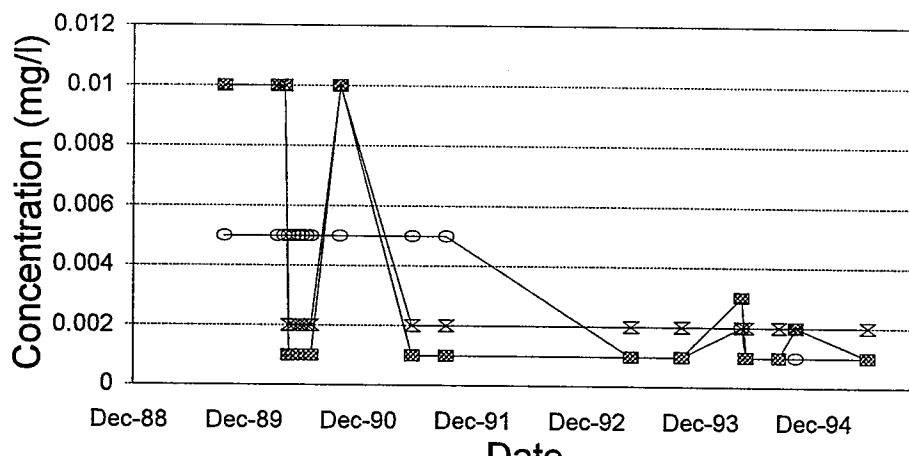


GFSW-7



Detection limits: Fe = 0.03 mg/l (9/89 - 6/95)
Mn = 0.02 mg/l (9/89 - 5/92); 0.01 mg/l (6/93 - 6/95)
Zn = 0.01 mg/l (9/89 - 5/92); 0.005 mg/l (6/93 - 6/95)

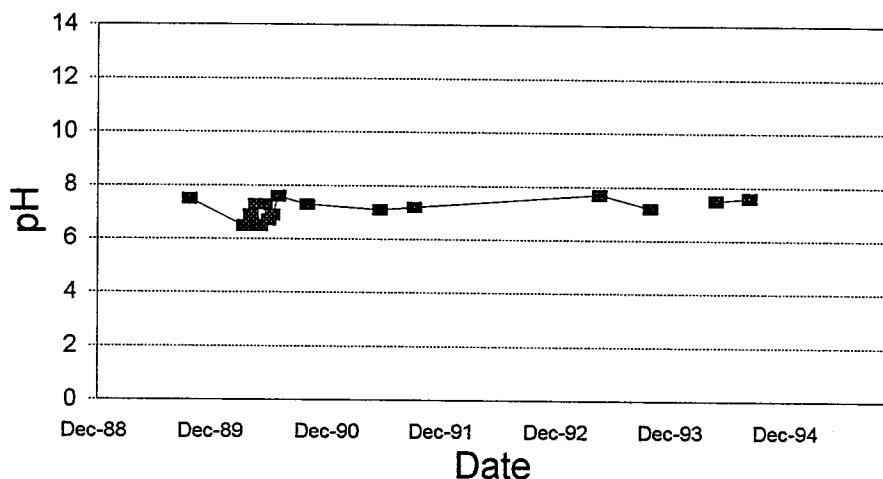
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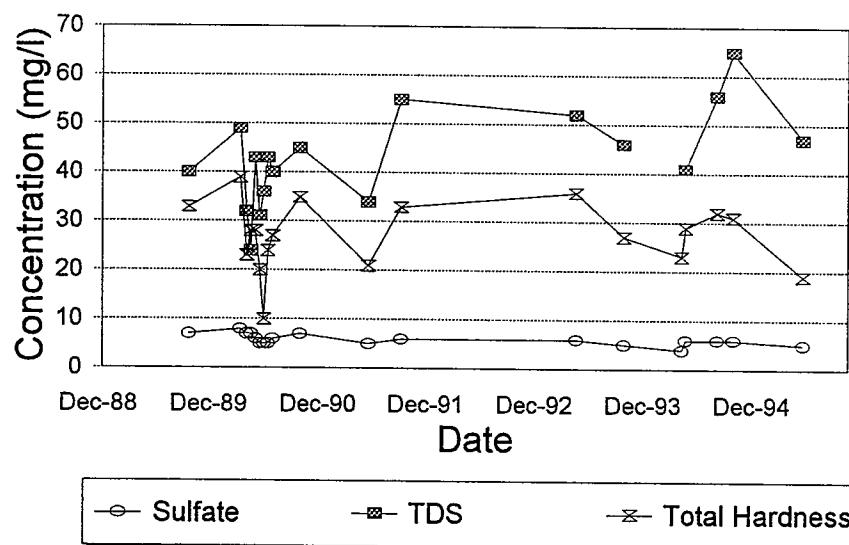
Detection limits: As = 0.005 mg/l (9/89 - 3/93); 0.001 mg/l (3/93 - 6/95)
Cu = 0.01 mg/l (9/89 - 5/91); 0.001 mg/l (9/91 - 6/95)
Pb = 0.01 mg/l (9/89 - 4/90); 0.002 mg/l (4/90 - 6/95)

GFSW-8

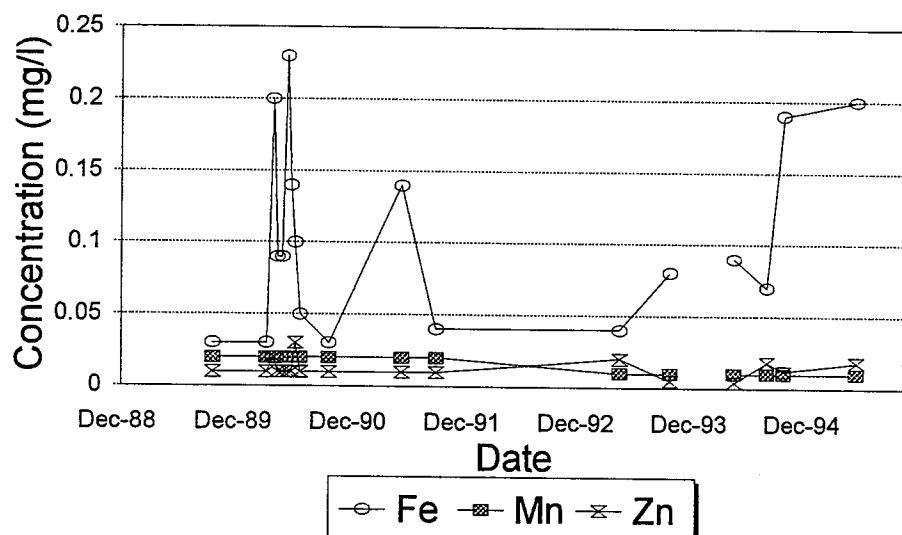
pH



GFSW-8

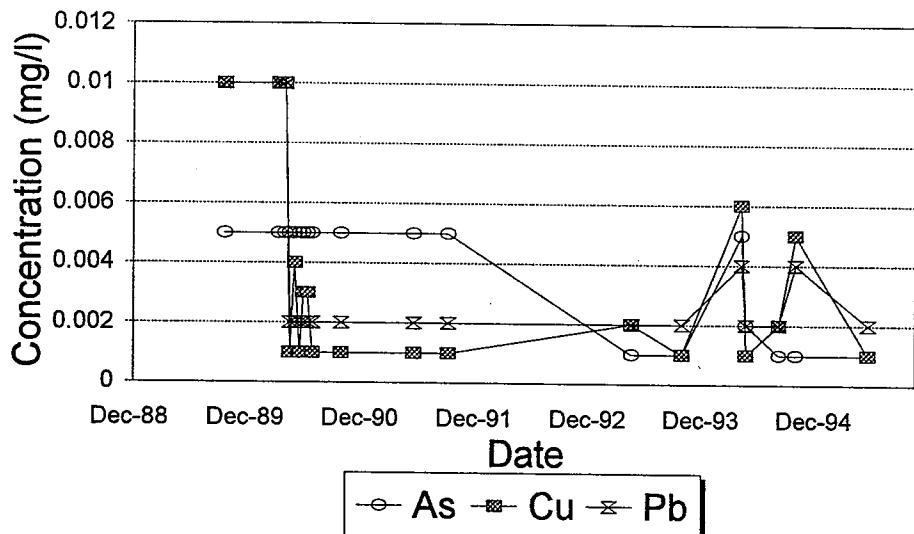


GFSW-8



Detection limits: Fe = 0.03 mg/l (9/89 - 6/95)
Mn = 0.02 mg/l (9/89 - 5/92); 0.01 mg/l (6/93 - 6/95)
Zn = 0.01 mg/l (9/89 - 5/92); 0.005 mg/l (6/93 - 6/95)

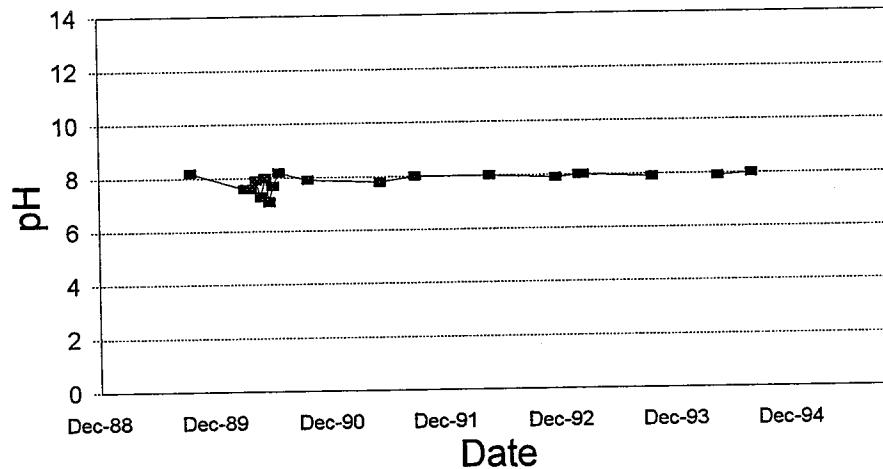
GFSW-8



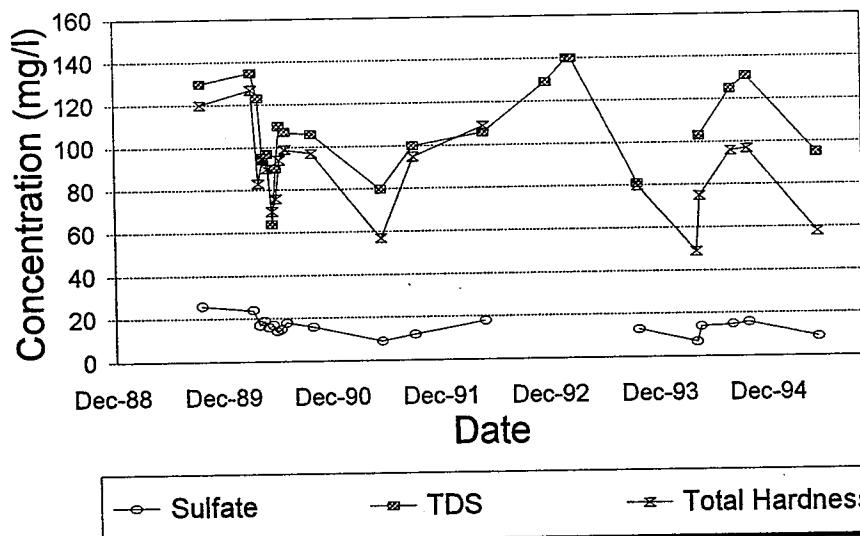
Detection limits: As = 0.005 mg/l (9/89 - 3/93); 0.001 mg/l (3/93 - 6/95)
Cu = 0.01 mg/l (9/89 - 5/91); 0.001 mg/l (9/91 - 6/95)
Pb = 0.01 mg/l (9/89 - 4/90); 0.002 mg/l (4/90 - 6/95)

GFSW-9

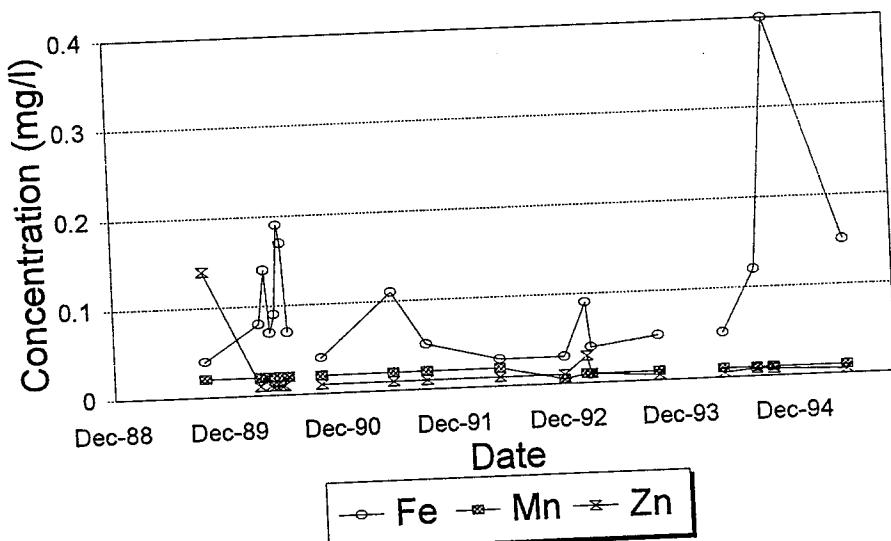
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GFSW-9

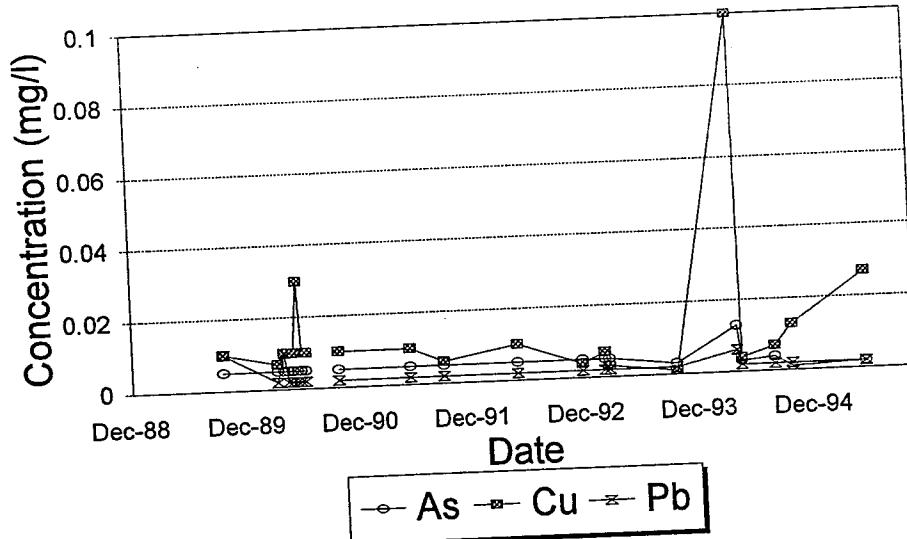


GFSW-9



Detection limits: Fe = 0.03 mg/l (9/89 - 6/95)
Mn = 0.02 mg/l (9/89 - 5/92); 0.01 mg/l (6/93 - 6/95)
Zn = 0.01 mg/l (9/89 - 5/92); 0.005 mg/l (6/93 - 6/95)

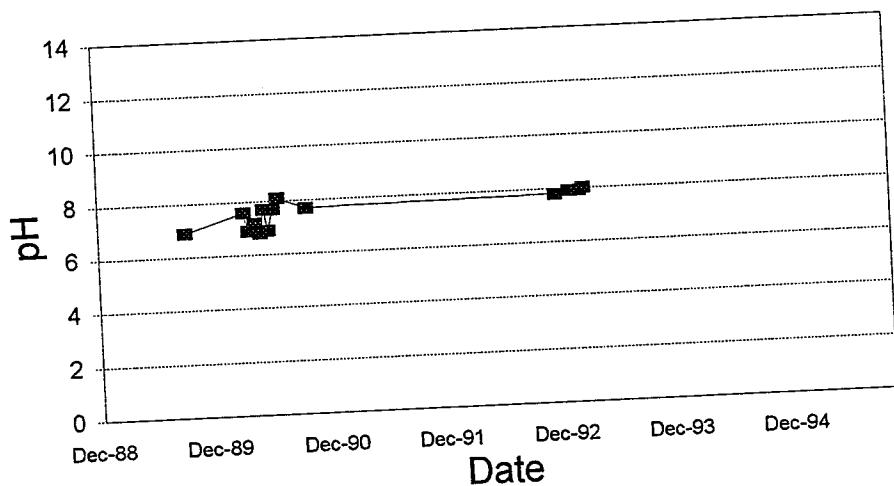
GFSW-9



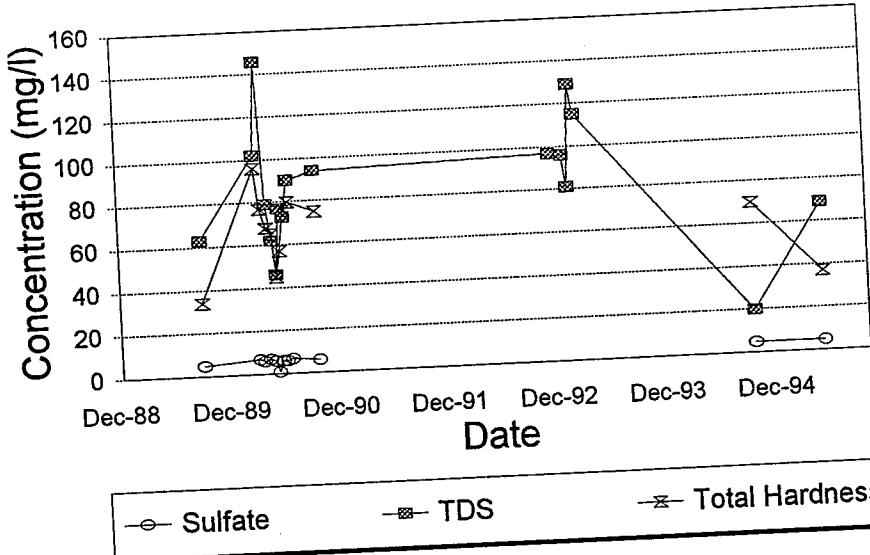
Detection limits: As = 0.005 mg/l (9/89 - 3/93); 0.001 mg/l (3/93 - 6/95)
Cu = 0.01 mg/l (9/89 - 5/91); 0.001 mg/l (9/91 - 6/95)
Pb = 0.01 mg/l (9/89 - 4/90); 0.002 mg/l (4/90 - 6/95)

GFSW-11

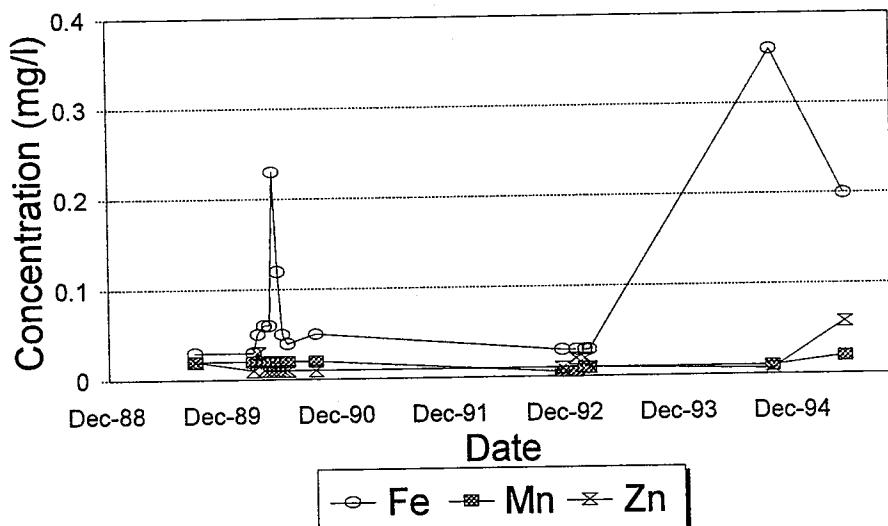
pH



GFSW-11

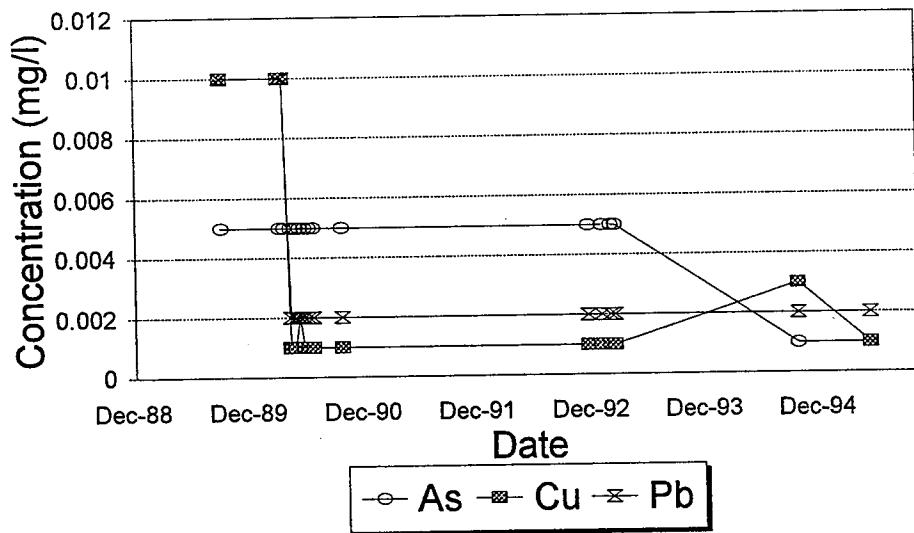


GFSW-11



Detection limits: Fe = 0.03 mg/l (9/89 - 6/95)
Mn = 0.02 mg/l (9/89 - 5/92); 0.01 mg/l (6/93 - 6/95)
Zn = 0.01 mg/l (9/89 - 5/92); 0.005 mg/l (6/93 - 6/95)

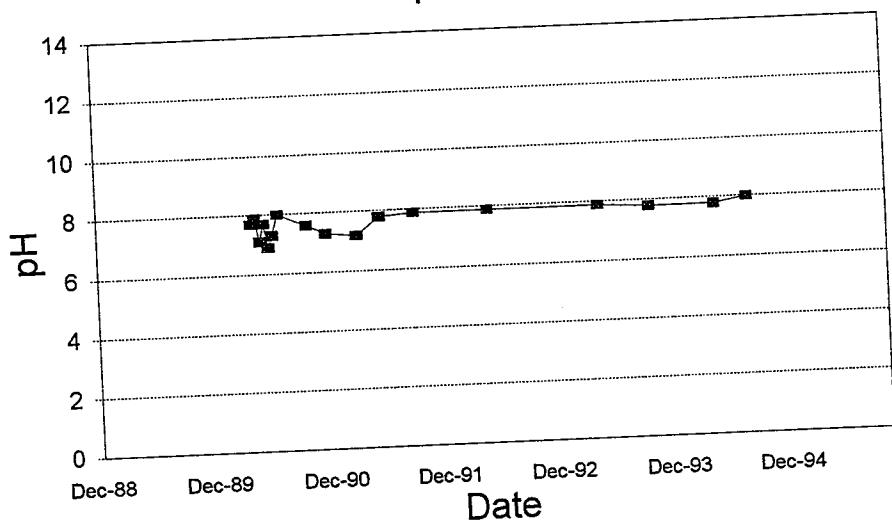
GFSW-11



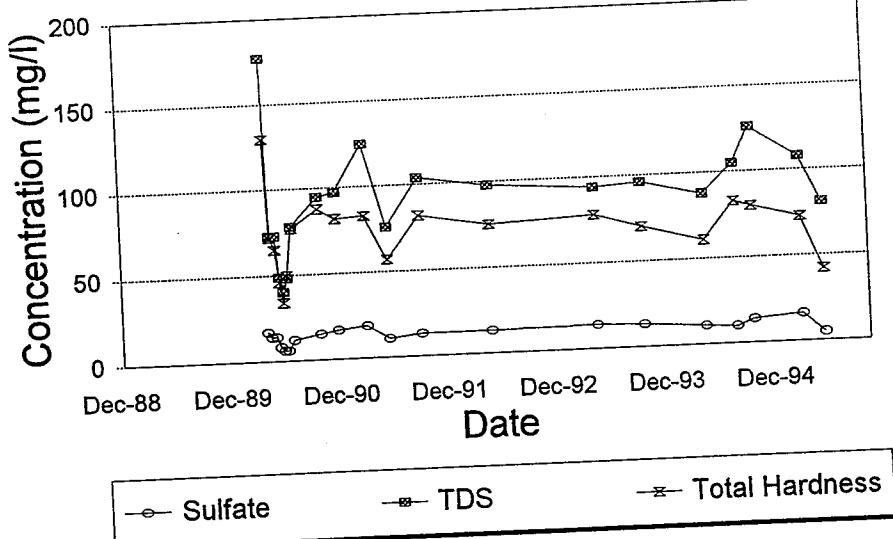
Detection limits: As = 0.005 mg/l (9/89 - 3/93); 0.001 mg/l (3/93 - 6/95)
Cu = 0.01 mg/l (9/89 - 5/91); 0.001 mg/l (9/91 - 6/95)
Pb = 0.01 mg/l (9/89 - 4/90); 0.002 mg/l (4/90 - 6/95)

GFSW-12

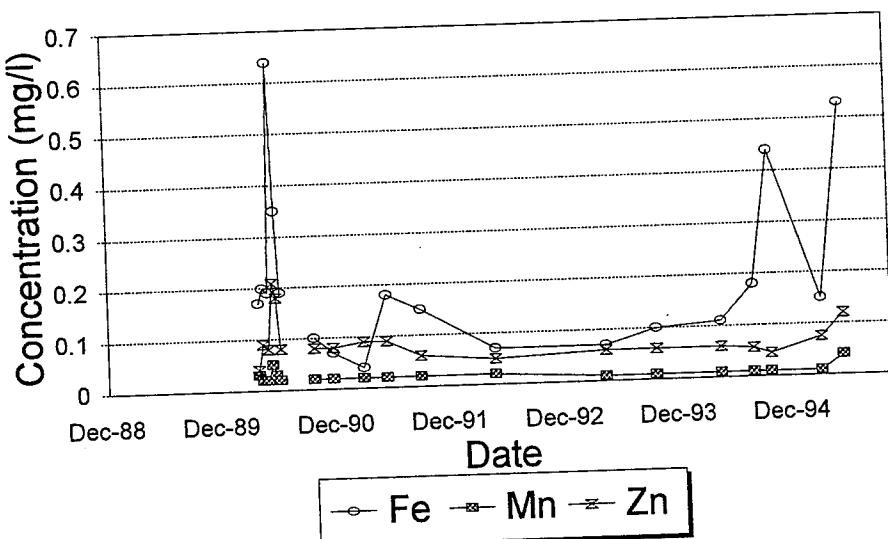
pH



GFSW-12

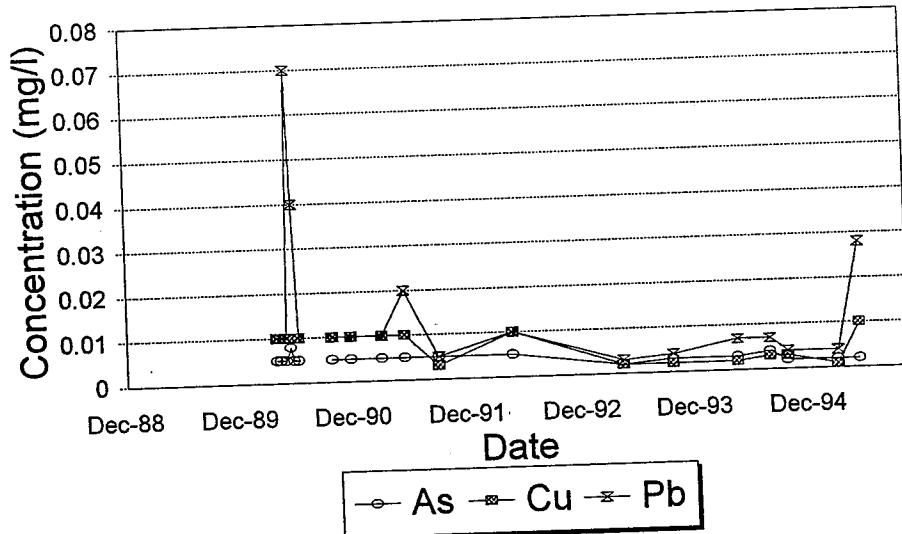


GFSW-12



Detection limits: Fe = 0.03 mg/l (9/89 - 6/95)
Mn = 0.02 mg/l (9/89 - 5/92); 0.01 mg/l (6/93 - 6/95)
Zn = 0.01 mg/l (9/89 - 5/92); 0.005 mg/l (6/93 - 6/95)

GFSW-12

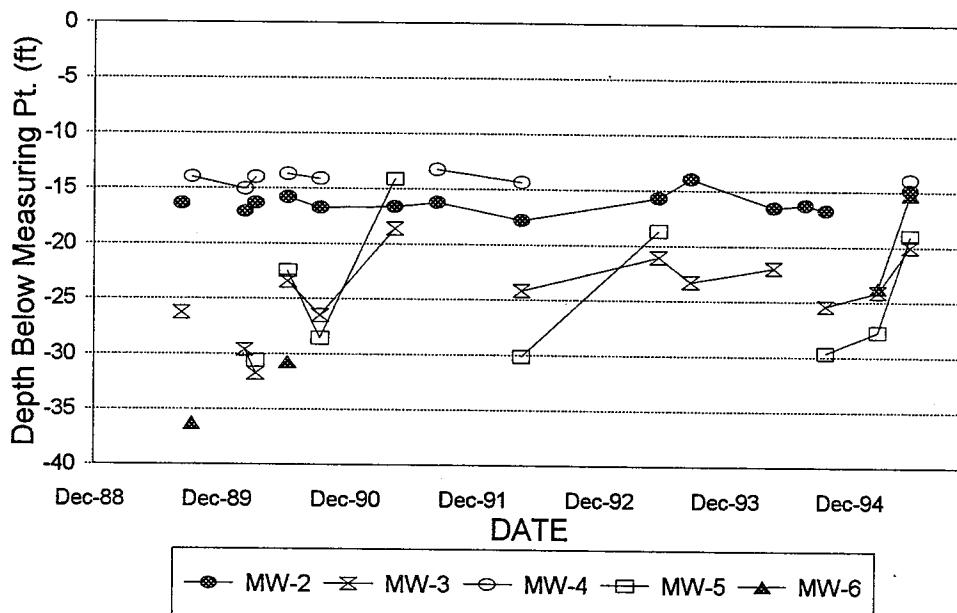


Detection limits: As = 0.005 mg/l (9/89 - 3/93); 0.001 mg/l (3/93 - 6/95)
Cu = 0.01 mg/l (9/89 - 5/91); 0.001 mg/l (9/91 - 6/95)
Pb = 0.01 mg/l (9/89 - 4/90); 0.002 mg/l (4/90 - 6/95)

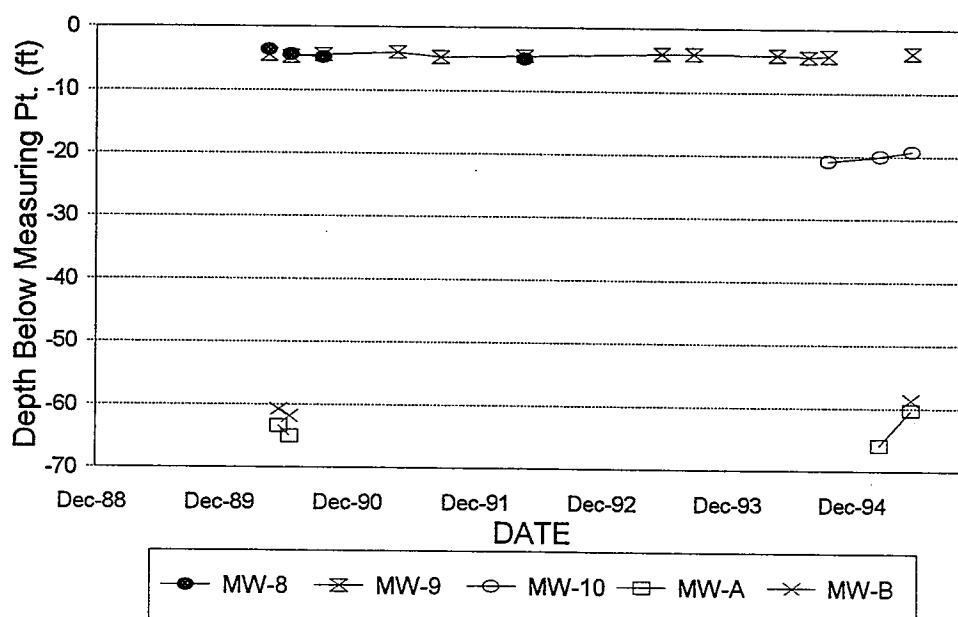
APPENDIX D

GRAPHS OF GROUNDWATER DATA
WATER RESOURCES MONITORING PROGRAM

WATER LEVEL MEASUREMENTS BELOW MEASURING POINT

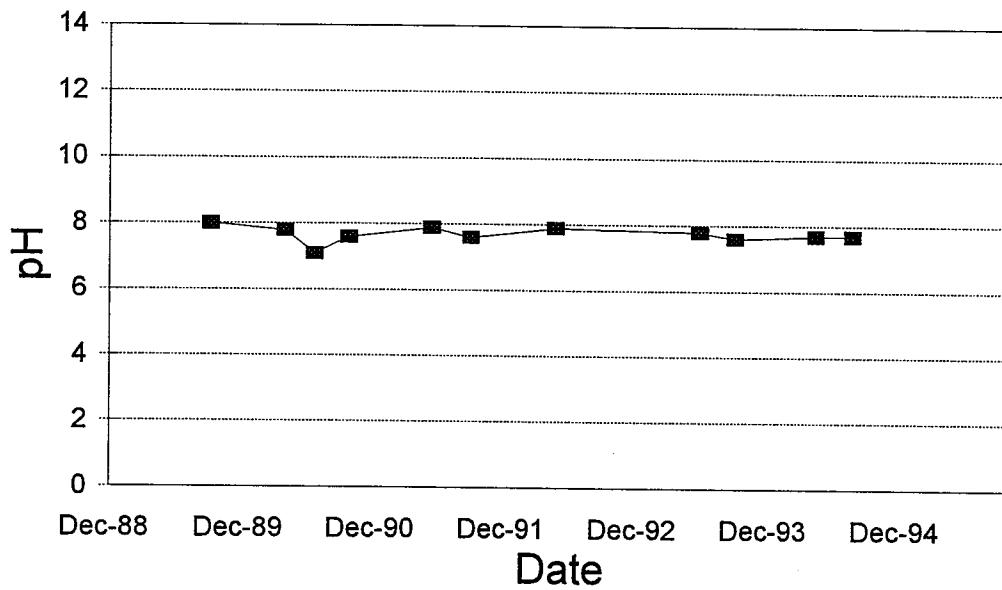


WATER LEVEL MEASUREMENTS BELOW MEASURING POINT

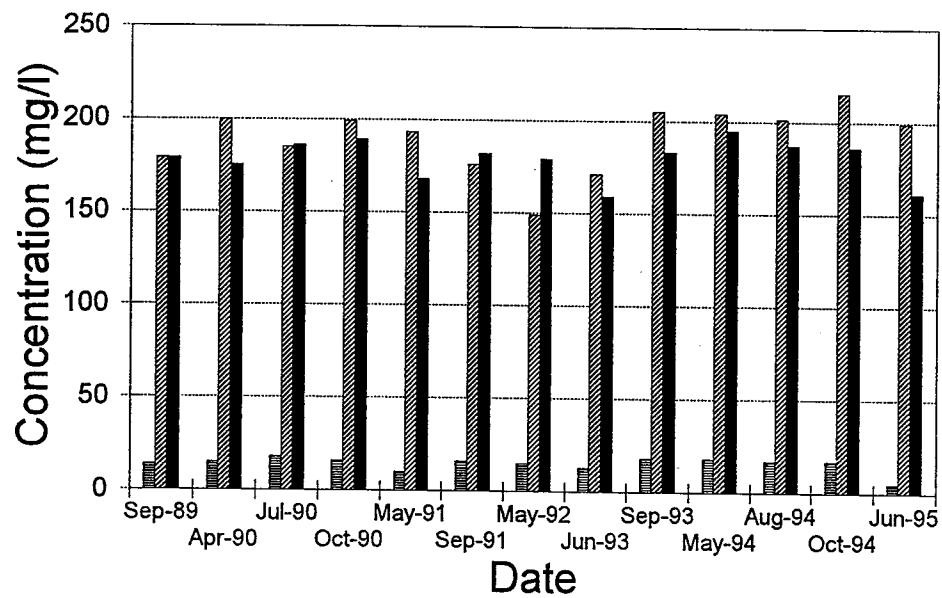


GFMW-2

pH



GFMW-2



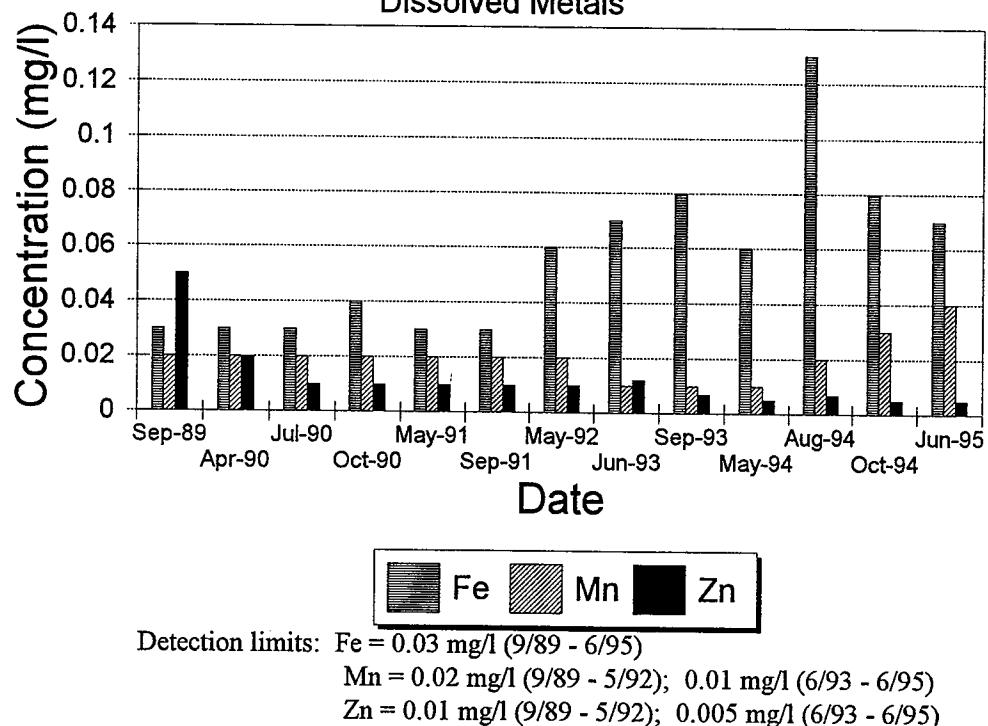
Sulfate

TDS

Total Hardness

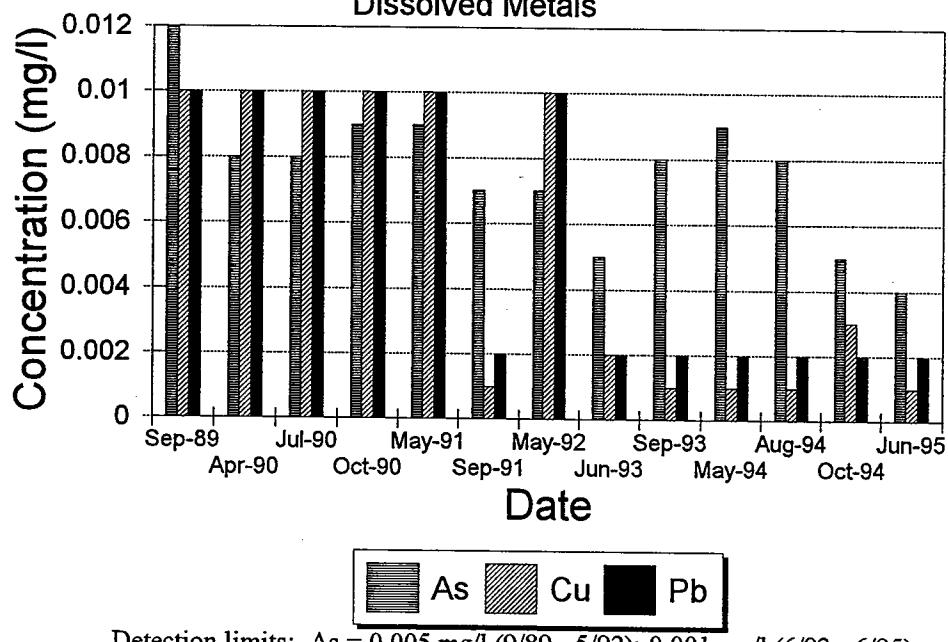
GFMW-2

Dissolved Metals



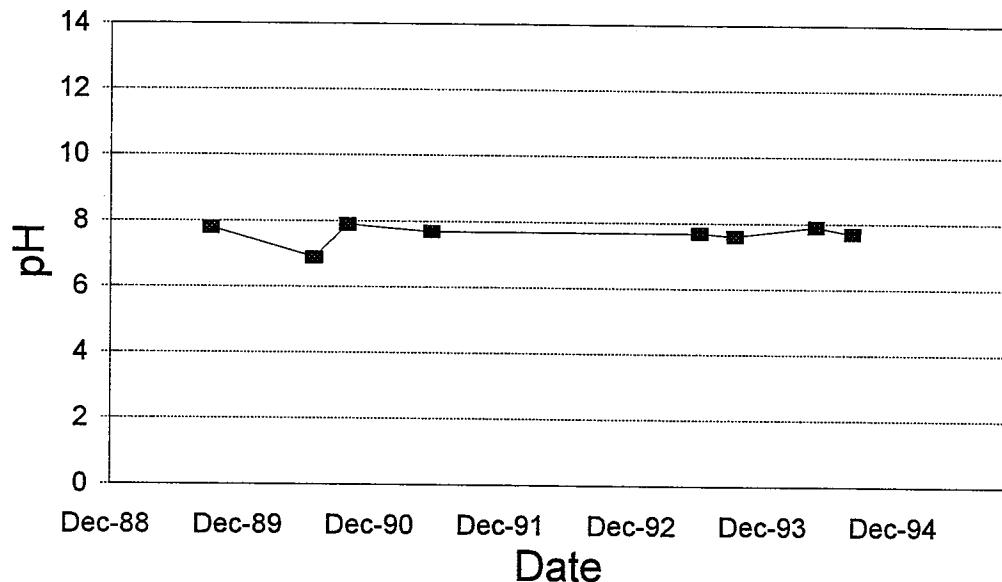
GFMW-2

Dissolved Metals

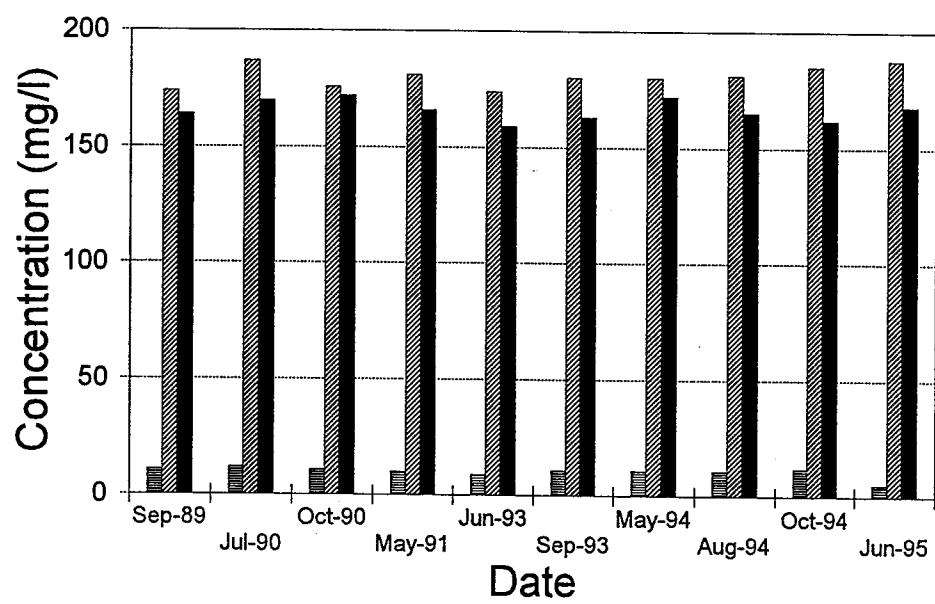


GFMW-3

pH

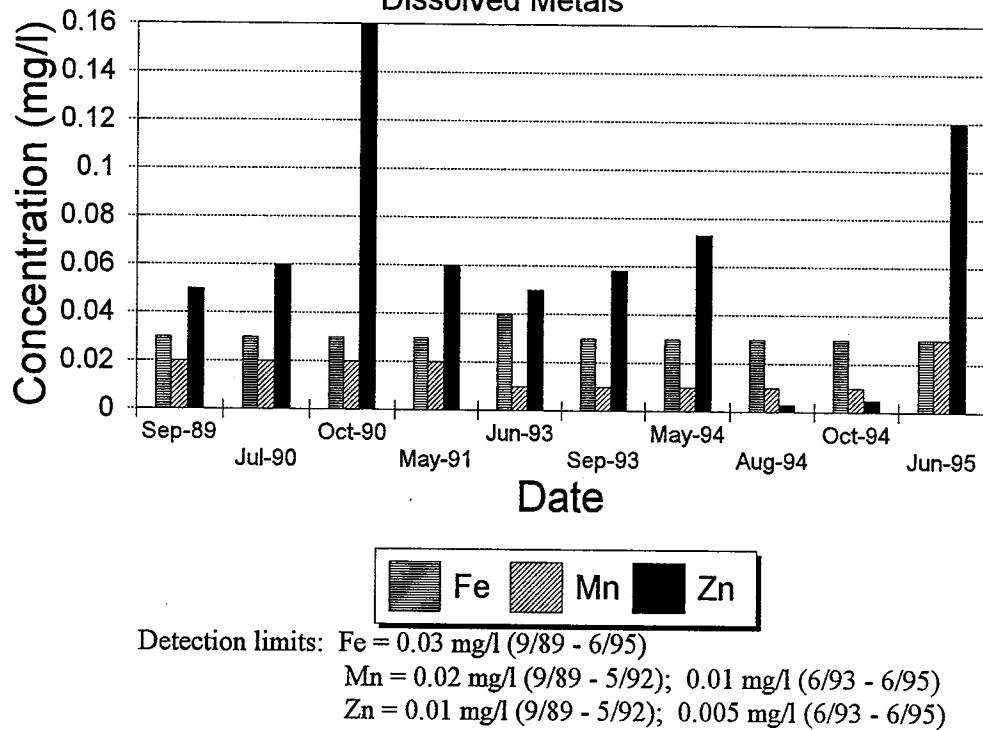


GFMW-3



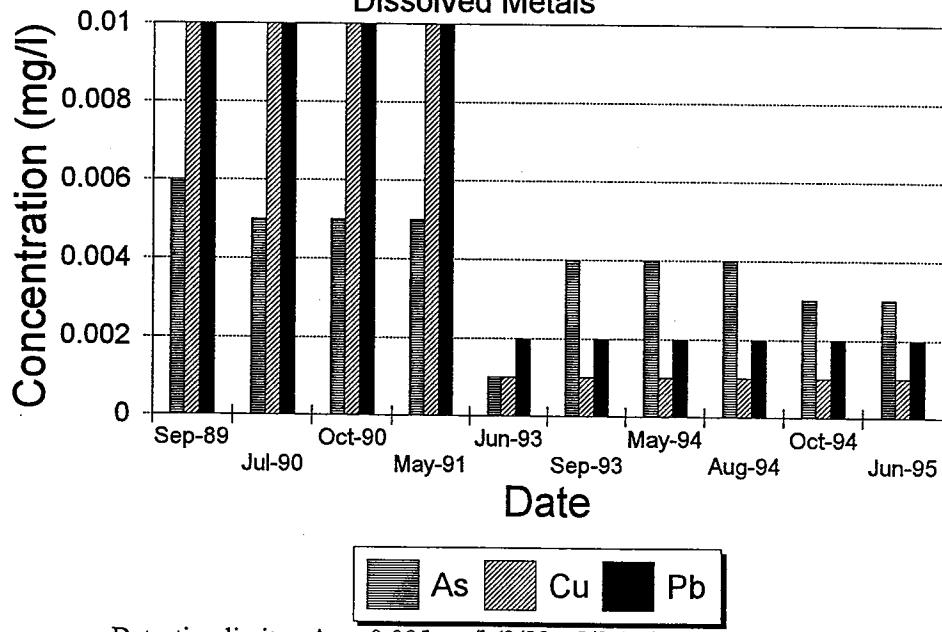
GFMW-3

Dissolved Metals



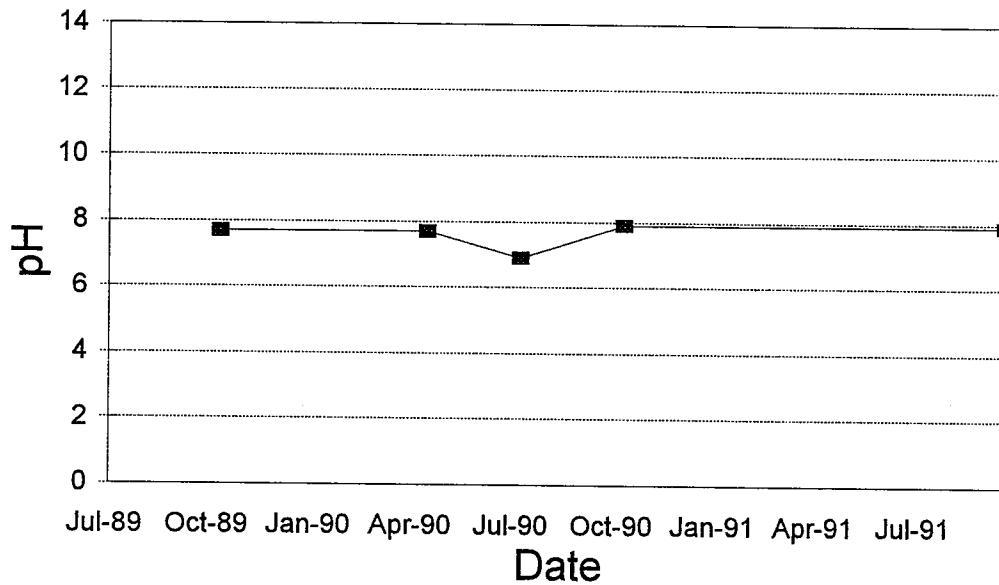
GFMW-3

Dissolved Metals

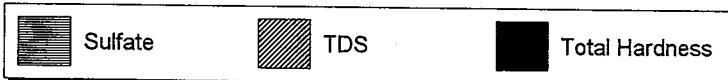
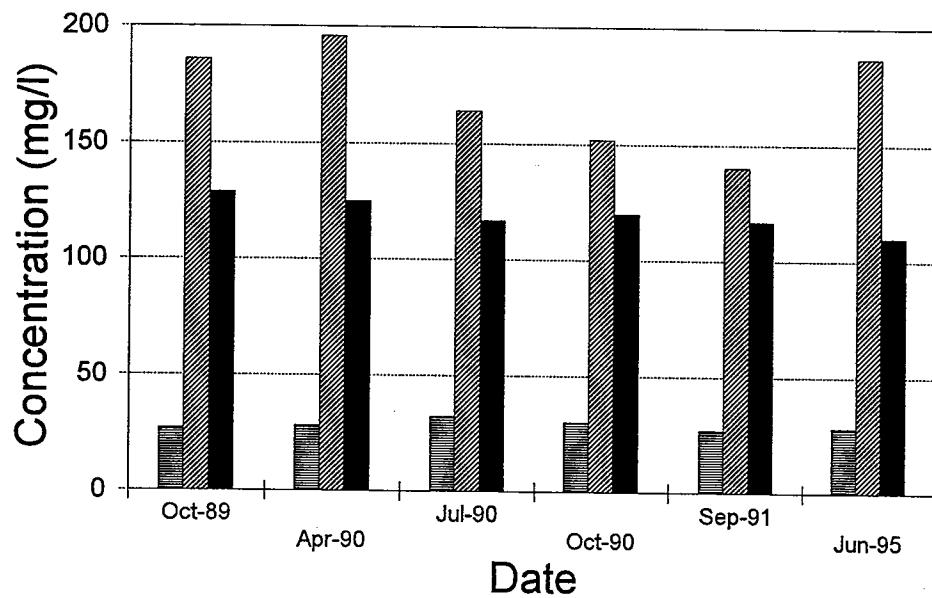


GFMW-4

pH

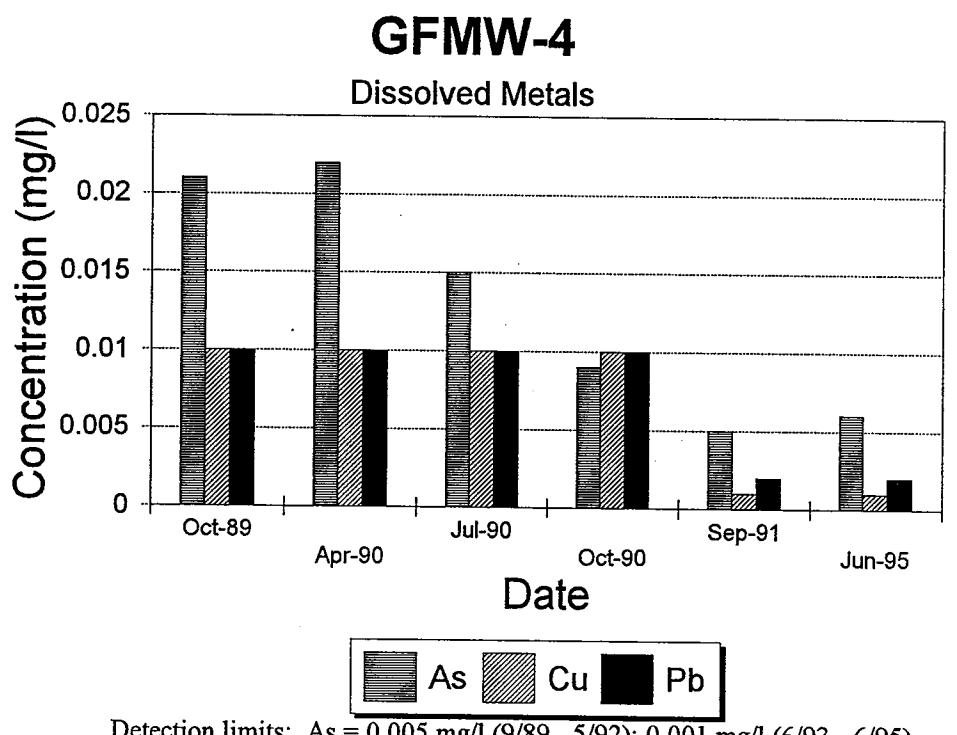
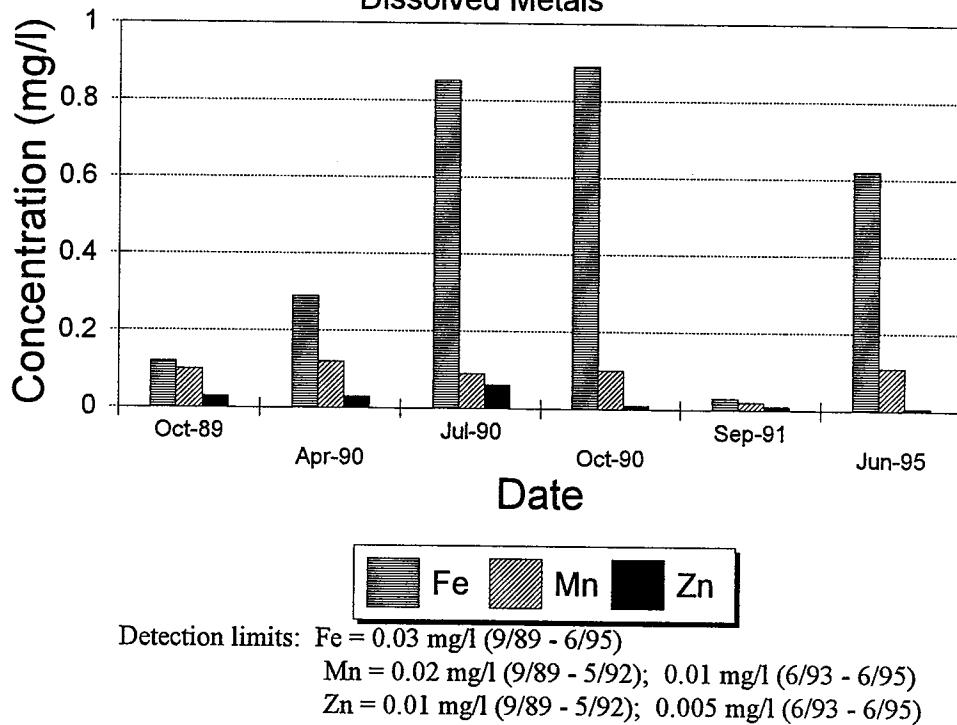


GFMW-4



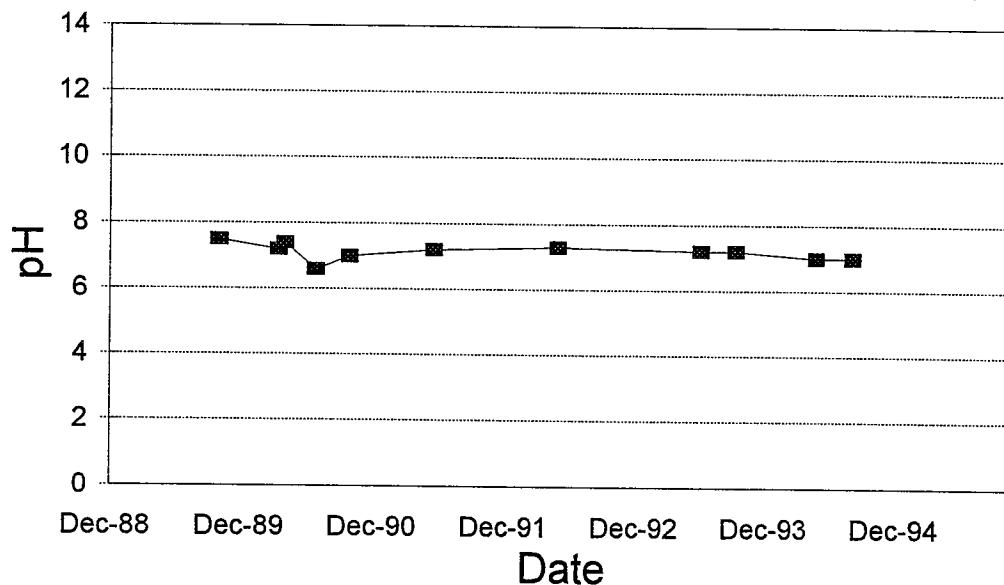
GFMW-4

Dissolved Metals

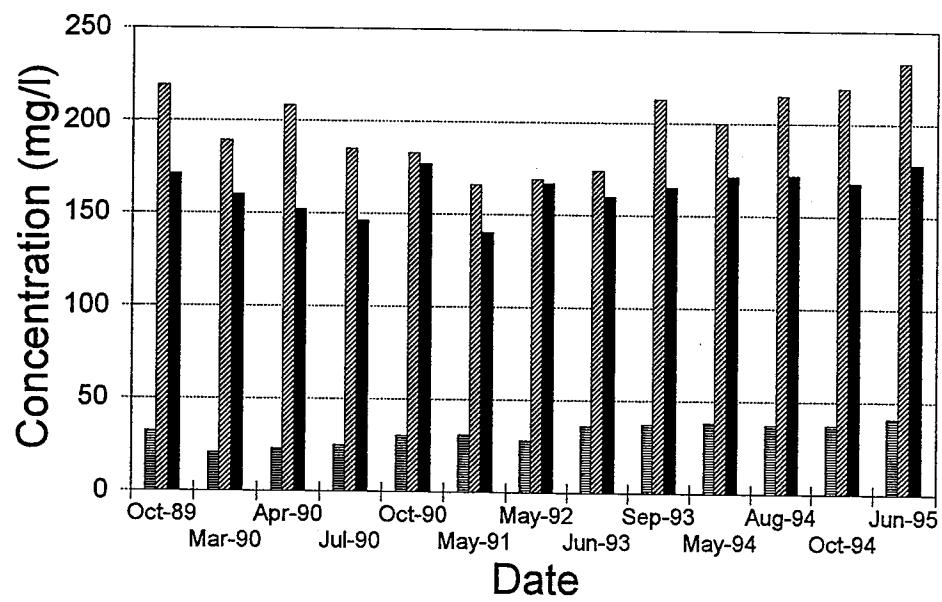


GFMW-5

pH

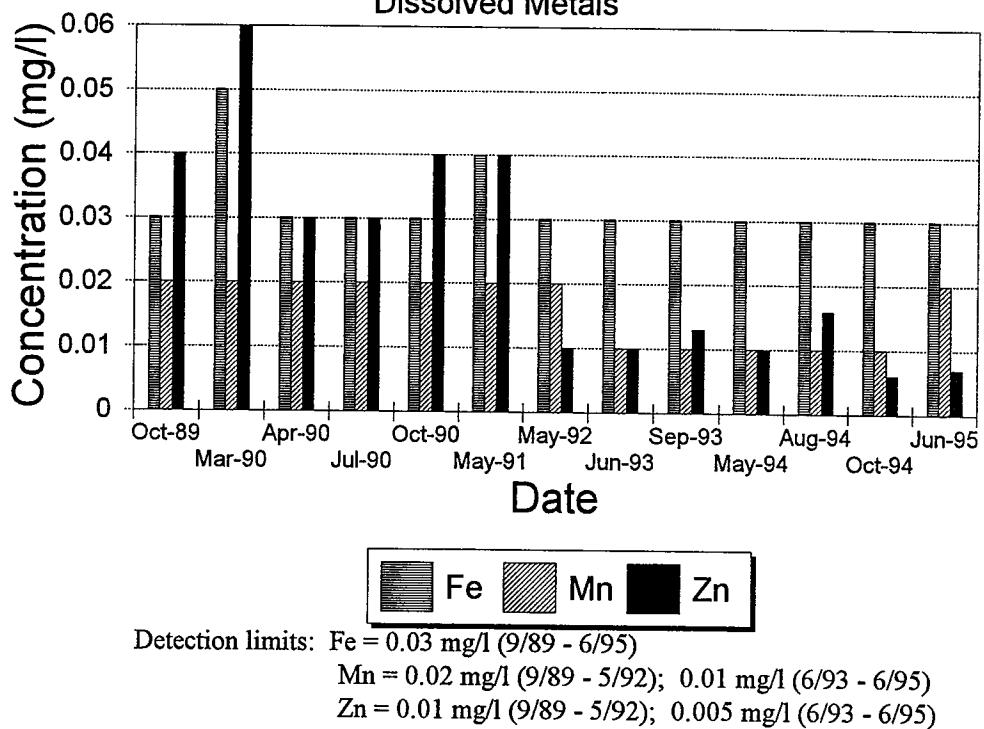


GFMW-5



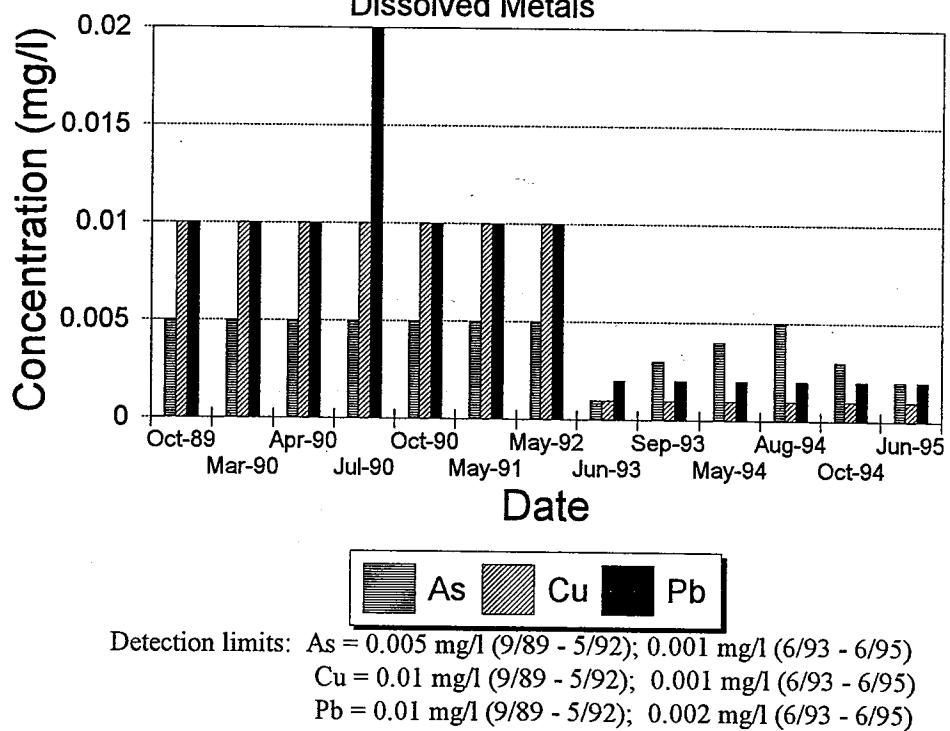
GFMW-5

Dissolved Metals



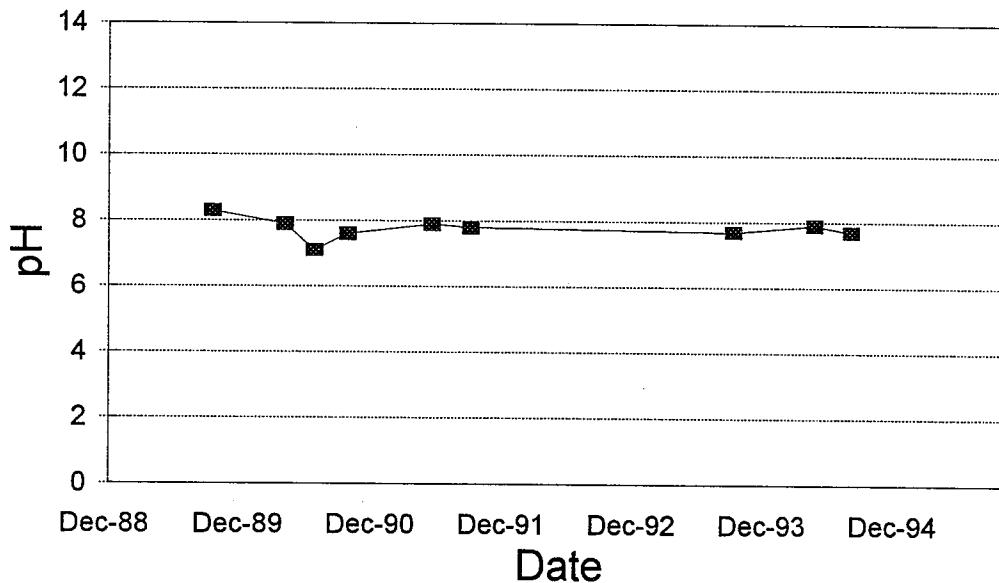
GFMW-5

Dissolved Metals

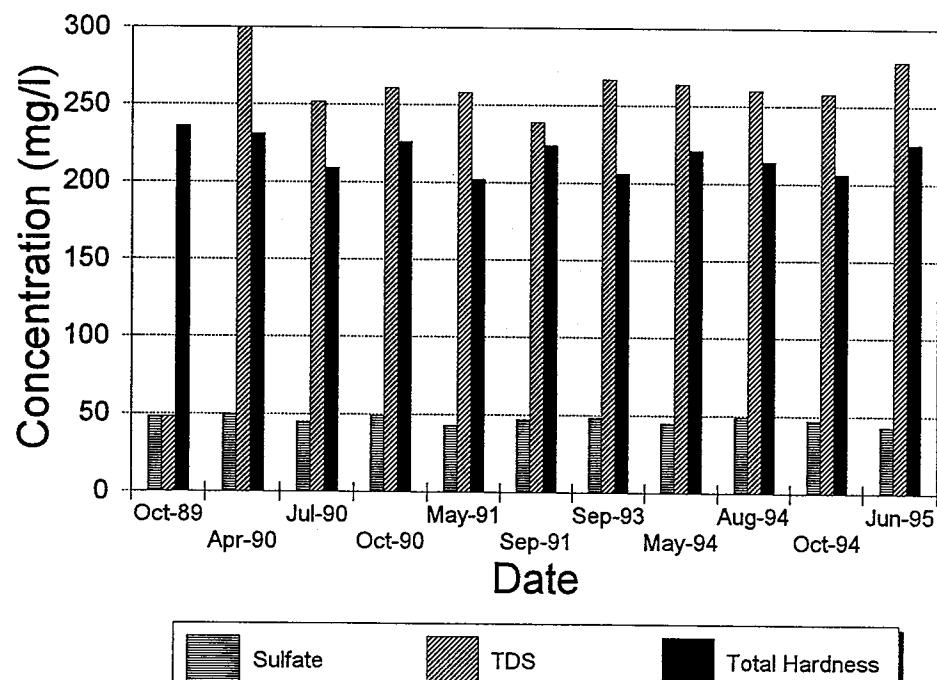


GFMW-6

pH

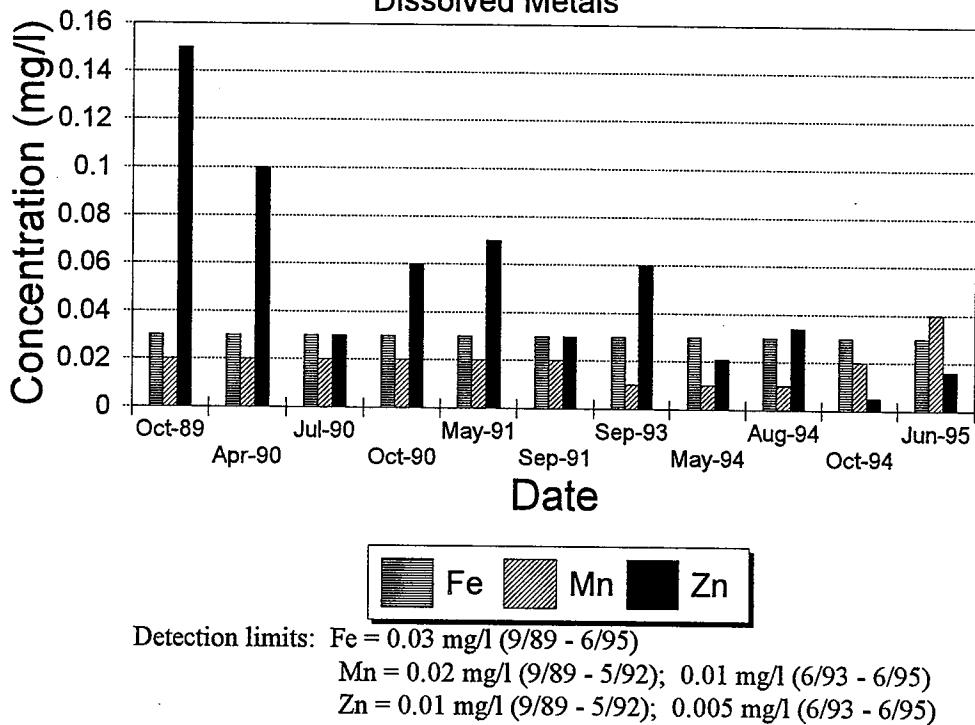


GFMW-6



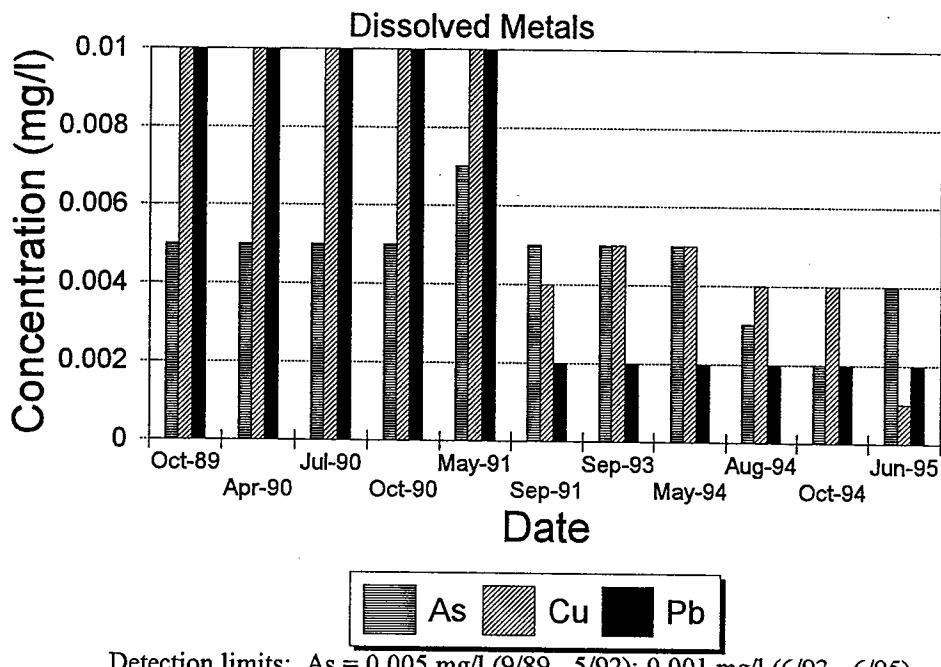
GFMW-6

Dissolved Metals



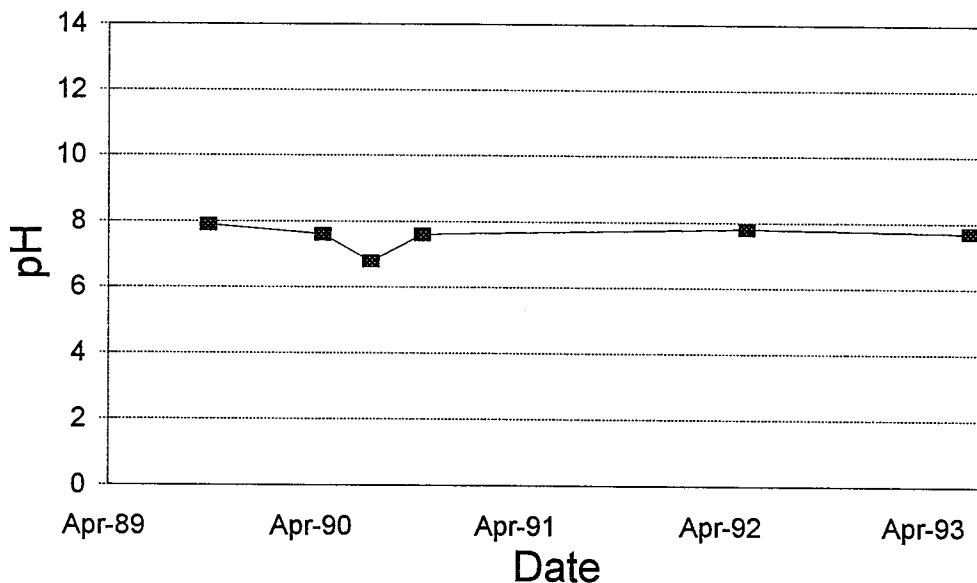
GFMW-6

Dissolved Metals

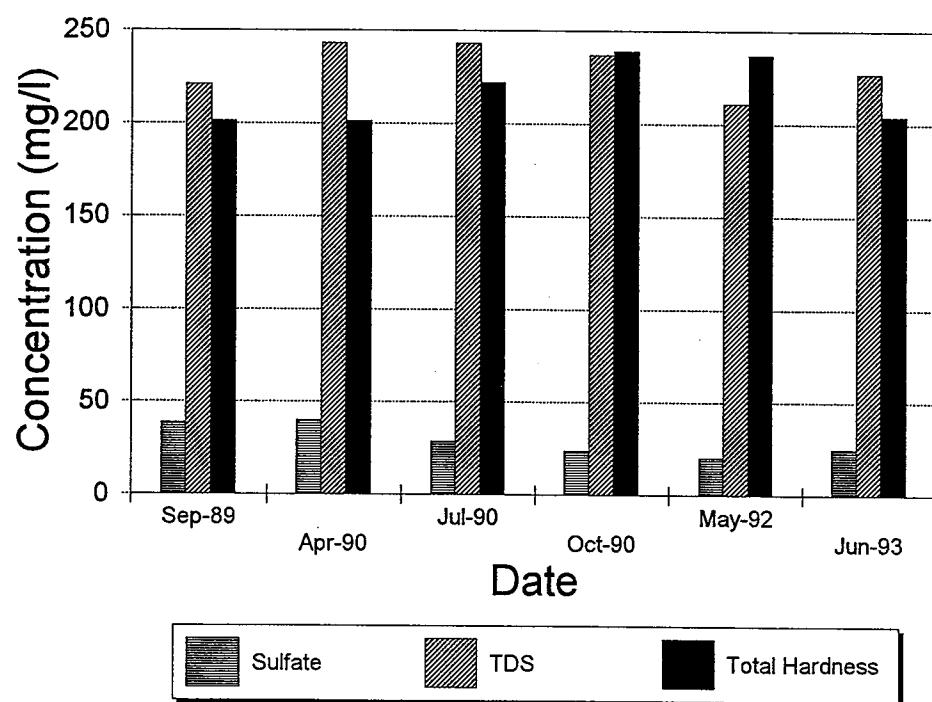


GFMW-7

pH

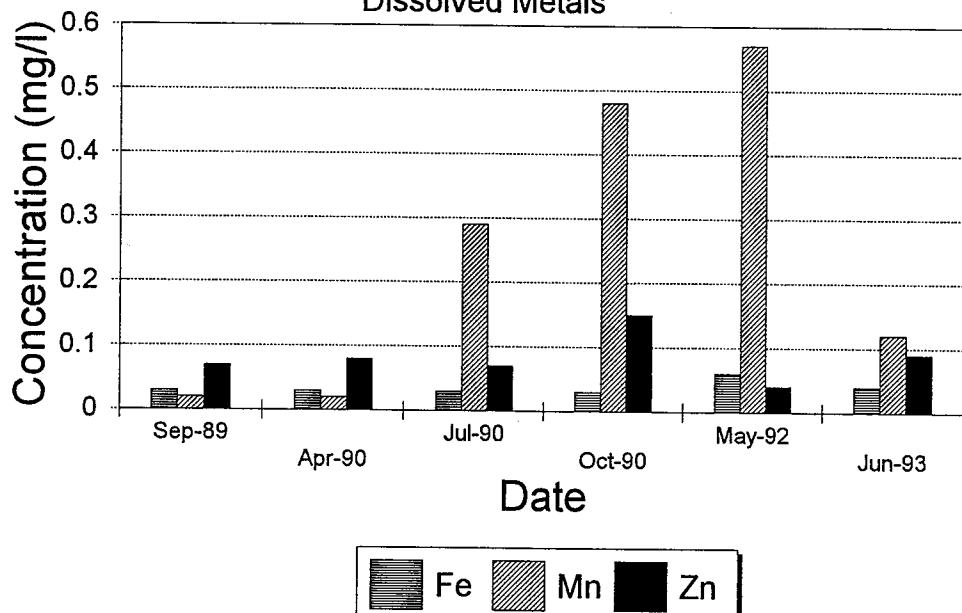


GFMW-7



GFMW-7

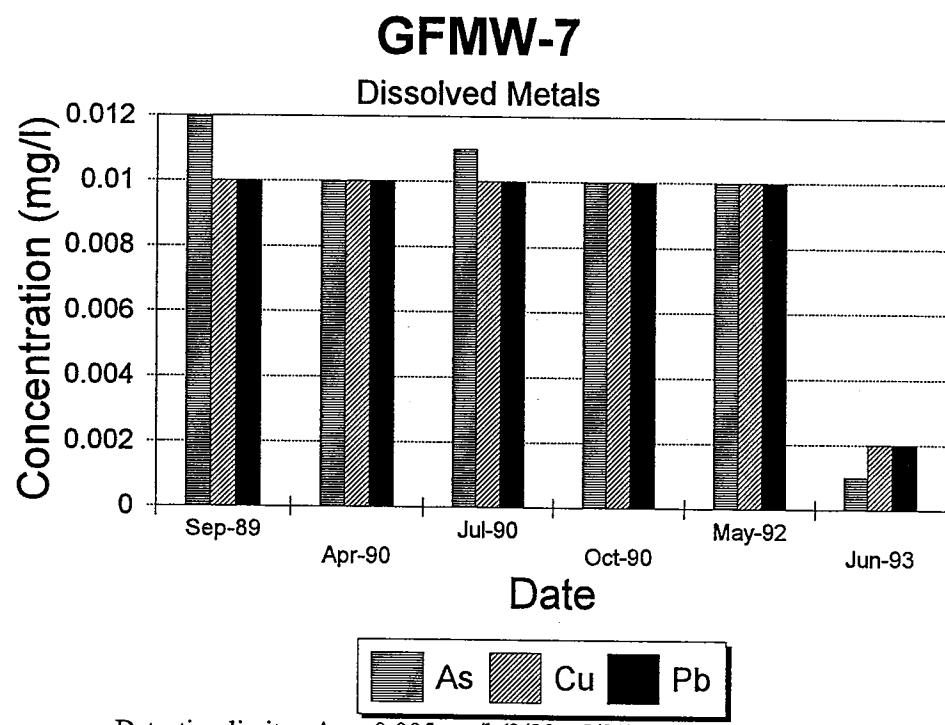
Dissolved Metals



Detection limits: Fe = 0.03 mg/l (9/89 - 6/95)

Mn = 0.02 mg/l (9/89 - 5/92); 0.01 mg/l (6/93 - 6/95)

Zn = 0.01 mg/l (9/89 - 5/92); 0.005 mg/l (6/93 - 6/95)

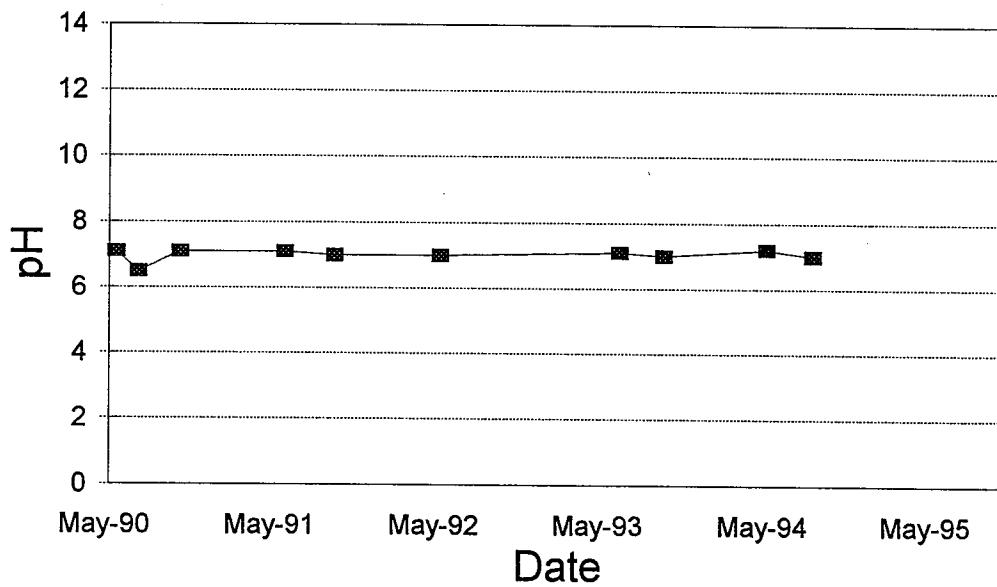


Detection limits: As = 0.005 mg/l (9/89 - 5/92); 0.001 mg/l (6/93 - 6/95)

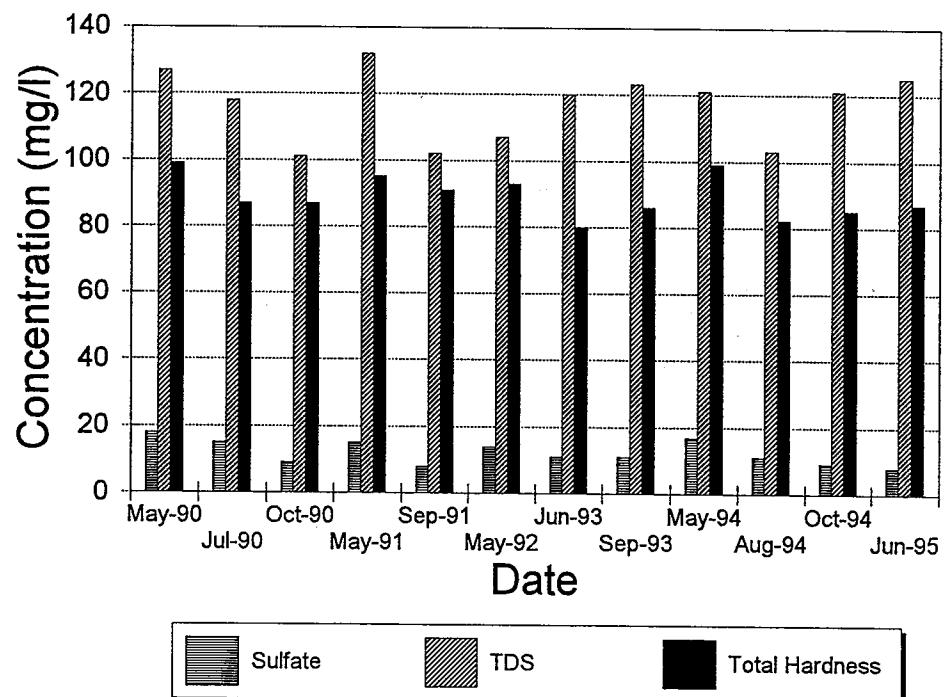
Cu = 0.01 mg/l (9/89 - 5/92); 0.001 mg/l (6/93 - 6/95)

Pb = 0.01 mg/l (9/89 - 5/92); 0.002 mg/l (6/93 - 6/95)

GFMW-9 pH



GFMW-9



GFMW-9

Dissolved Metals

